

# Chapter 4

## Long-Term Depression and Economic Structural Reform (1991–2000)



### 1 Keynotes of Japan's Economy and Trade and Industry Policy in the 1990s

#### 1.1 *The 1990 Trade and Industrial Policy Vision of the 1990s*

##### 1.1.1 Collapse of the Bubble and the Prolonged Recession

Betraying the optimistic expectations that had followed on the bursting of Japan's economic bubble, the Japanese economy suffered a long-term recession in the 1990s. Economic growth rates fell to 1.9% in 1992 and below 1% the following year. The steady growth of exports and the trade surplus (which reached over 100 billion dollars) during these years suggest that the recession was largely the result of a marked slump in domestic demand. Japan's solid export record drew mounting criticism from abroad. Meanwhile, a lack of tax revenues meant fiscal rebuilding was interrupted and deficit spending mounted once again. Nonperforming loans, which were aftereffects of the bubble's collapse, acted as a drag on the economy, in spite of steep drops in interest rates. The so-called convoy system of financial administration, which had accompanied financial liberalization, came under review, while the volatility of financial institutions and the question of how to manage their bankruptcy became major issues. If anything, the low interest rates greatly limited the possibility of using other economic stimulus measures. The economy remained stagnant.

Moreover, in February 1993, Japan saw a growing trade surplus along with rapid yen appreciation after a long period of stable exchange rates. On August 17, the currency hit a record of  $\$1 = \text{¥}100.40$ , after which it depreciated slightly heading into the new year. This yen appreciation caused a drop in the revenues of corporations in export industries. In response, firms cut back on employment. Consumer morale dampened accordingly, spurring a slump in consumption. Large companies were

forced to restructure, closing factories and reducing staff by the thousands, and unemployment became a pronounced issue. In April 1993, the government devised emergency economic measures, investing more heavily in public works, reducing taxes to promote acquisition of real estate, and taking measures for fiscal expansion. In September, the official discount rate was reduced to 1.75, a record low.

Although these policies effectively slowed the decline in business conditions, they had little ripple effect: the first half of 1993 presented promising economic developments, but the yen's rise stalled the economy again, leading to a scarcity of demand on a scale not seen in the postwar period. Production dropped and the year ended with little prospect of a recovery from the deflationary conditions. Japan was meanwhile adopting economic policy changes for international reasons: in July 1993, Prime Minister Kiichi Miyazawa met with US President Bill Clinton, who agreed to a framework—previously discussed at the April summit—for comprehensive discussions of economic issues between Japan and America. This framework rested on three pillars: (1) reduction of Japan's current account surplus and America's budget deficit, (2) the opening of negotiations and discussions by sector and structure, and (3) cooperation on environment and technology. Furthermore, the final draft agreement of the GATT Uruguay Round was adopted on December 15, and in April 1994, was signed at Marrakesh by 125 countries and regions, replacing GATT and leading to the establishment of the World Trade Organization (WTO) on January 1, 1995. The establishment of the WTO meant the maintenance and promotion of global free-trade systems, but America, in matters of economic policy, continued to favor bilateral negotiations like the above Japan–US economic talks. This inevitably led to the formation of bloc economies and to trade discrimination against those outside those blocs.

From 1995–1996, the world economy as a whole continued expanding, due to the significant growth of developing economies, especially in Asia, but Japan remained in a slump. Although 1995 appeared to usher in recovery, albeit a slow one, the Great Hanshin Earthquake of mid-January led to a sharp appreciation of the yen, which rose to the vicinity of 80 yen to the dollar, and Japan's economy again lost its vigor. Imports of products and raw materials soared, accelerating deflation or the so-called price destruction; the unease about employment continued unabated, and the specter of deflation began to haunt Japan. The “Survey of economic trends” by Keidanren indicated that there were many causes for concern after 1994, including the rise in value of the yen, the stagnation of capital investment, the persistence of excess employment, and the business world's negative outlook on the economy.

Moreover, the bad debts held by financial institutions and the fall in land prices that had given rise to them acted as a heavy drag on economic recovery. The instability of the financial sector led to the collapse even of financial institutions that had been regarded as “beyond doubt.” The 1994 failures of the Tokyo Kyowa Bank and very secure credit cooperatives were followed by the revelation that the city's largest credit union, Cosmo, was going bankrupt. One month later, in August, the Ministry of Finance announced a rescue package for Hyogo Bank, the largest of the second-tier regional banks, and for Kizu Shin'yo Kumiai, the largest of the credit cooperatives.

The yen returned to \$1 = 100-yen levels in August of 1995, and in September, the official discount rate was reduced to 0.5%, another record low. These changes, along with large-scale policies for boosting the economy, enabled Japan to avoid going deeper than the already historic depths of this business cycle. That same month, however, the off-the-book losses of Japanese banks' overseas branches were brought to light, greatly undermining trust in Japan's financial system and leading to the so-called Japan Premium. Thus, Japan's economy saw many changes, but after the bursting of the bubble Japan was unable to take advantage of opportunities for recovery. This led in the fall of 1997 to the outright failure of the Sanyo Securities Company, the Hokkaido Takushoku Bank, and Yamaichi Securities.

### 1.1.2 The *Vision of the 1990s*

The *Vision of the 1990s*, compiled by the Industrial Structure Council in July 1990, summarized the goals of industrial policy as the following: (1) contributing to international society and undertaking reform on an international scale; (2) realizing a relaxed and affluent life for the people; and (3) securing the foundations for long-term economic development (Okazaki 2012, p. 13).

The first goal emphasized structural reform based on a recognition of the following realities: (1) emerging friction among Western nations following the collapse of the socialist sphere in Eastern Europe; (2) emerging friction not only in trade but also in investment, technology, and finance, as well as in structural areas such as national systems and customs, due to growing international economic exchange; and (3) the growing unease about Japan's economic power owing to Japan's increased presence in the world economy and a distrust that extended even to Japan's social structure and culture. However, the *Vision's* stress on international friction in explaining the need for structural change indicates that there was a lack of awareness that the industrial structure would become a hindrance to growth. In other words, Japan was still subject to the constraints of the bubble era.

The second goal articulated in the 1990s *Vision* recognized the so-called paradox of affluence: that although the consumption of goods and services had become more sophisticated, basic living conditions, including free time, work environment, living space, and consumer choice, were deteriorating. The *Vision* pointed out that the issue lay in Japan's "corporate-type society" and its prioritization of production over lifestyle, and stressed that resolving this problem would require a shift to a "people-oriented industrial policy."

The third goal assumed a medium-term shift in Japan's industrial structure toward a "service economy," meaning an increase in the service industry's share in the national economy. Another dominant feature of the *Vision* was its consciousness of ongoing "globalization," which had become a clearer trend over the course of the 1980s.

The *Vision of the 1990s* was therefore significant in that it initiated the call for a reform of institutions and practices in order to overcome economic friction. The formation of this *Vision*, like those stressing heavy and chemical industrialization,

knowledge intensity in the 1970s, and creative knowledge intensity in the 1980s, helped create a common understanding of the issues.

Nonetheless, the 1990s *Vision* was slightly different in character from its predecessors, because of its emphasis on changing lifestyle rather than on new candidates for growth industries. The new *Vision* did not attract widespread attention, however. People may have been unwilling to embrace it because it suggested that the rapid growth era and the stable growth that had followed were coming to an end. None of the *Visions* formulated after the 1980s conveyed a sense of purpose comparable to that of their predecessors, and the curtain was thus drawn on the era in which industrial policy meant the development of specific industries.

Changes were evident, too, in the kinds of issues that MITI regarded as policy priorities. The issues raised in the *1990s Vision* crossed bureau lines within the Ministry, so committees were established for bureaus to study and address these issues jointly. It therefore became established practice in the 1990s for the various bureaus to address policy-making collaboratively. Even the Basic Industries Bureau, which had a particularly strong identity of its own, became open to tackling issues that cut across bureau boundaries, like the development of advanced technologies and recycling, with an emphasis on energy conservation, safety, and the environment.

### 1.1.3 The 1994 “Subcommittee Reports on Basic Issues”

With economic structural reform emerging as the government’s chief goal from around 1993 and 1994, many policy issues surfaced that transcended basic trade and industrial administration. MITI began actively developing policies to address them. The basic purpose of reform was to transform Japan’s economy into a domestic demand-oriented economic structure aimed at rectifying external imbalances, to which end policy was directed to the development of social capital, deregulation, and administrative reform. MITI’s tasks were: first, to define the new areas needing social capital and to clarify the responsibilities and financing involved in that social infrastructure; second, to formulate a basic direction and principal policy issues from the point of view of establishing an environment for inter-industry businesses; and third, to put together a vision of the industrial structure of the future.

The Industrial Structure Council’s Fundamental Issues Subcommittee, established in October 1992, issued an “Interim report” in June 1993, “Interim recommendations” in November 1993, and a final report titled “Industrial structure of the 21st Century” in 1994 (Okazaki 2012, p. 15).

“Interim recommendations” addressed the need to overcome the prolonged economic recession, while also acknowledging the fact that Japan was facing mid- to long-term structural problems in three areas. (1) On the macro side were mounting foreign criticism of Japan’s dramatic current account surplus; concerns about the hollowing out of industry due to the relocation of industry overseas in response to the appreciating yen; and the inadequacy of social capital and living standards even as Japan faced a demographic shift to an aging society, impeding the achievement of an affluent lifestyle and suppressing the development of new industries.

(2) On the micro side were government regulations, restrictive business practices, and the institutional impasses and fatigue of existing mechanisms. These inhibited entrepreneurial spirit and the growth of new industries and hindered access to the Japanese market, thereby limiting consumer choice for low-cost and diversified products. (3) Regarding Japan's industrial structure, concern focused on the coexistence of highly productive industries in highly competitive markets with inefficient, uncompetitive industries protected by entry regulations. This was also a factor in the price differential between the domestic and overseas markets.

The following were needed to address the microeconomic issues: (1) relaxation of government regulations, putting in concrete terms the suggestions of the Interim Report on Deregulation ("Hiraiwa Report"), produced by the Economic Reform Study Group under Prime Minister Morihiro Hosokawa; (2) a review of private-sector practices restricting competition, which meant strengthening the enforcement of cartel and unfair trade regulations under the Antimonopoly Law and expanding the system of litigation by private parties; and a new institutional framework appropriate for the twenty-first century, involving reform of the corporate, employment, and financial- and capital-market systems. Specifically, this would require (1) "bringing partial fluidity to employment" through reform of the Commercial Code, the introduction of multiple tracks for the labor market within corporations, and expansion of the broader labor market; and (2) reform of the financial system based on the recognition that Japan's huge savings were not being effectively utilized for the potential demand for funds, due to insufficient diversity of financial services, competition among financial institutions, and the poor functioning of the corporate bond and stock markets.

As is evident, the Interim Recommendations saw the economy as a system composed of several subsystems and, recognizing the diversity of international economies, called for comprehensive reform of Japan's economic systems.

The Interim Recommendations were significant first for their fundamental point of view that the relaxation or elimination of regulations would not suffice for improving market functions, and that an institutional framework supporting market mechanisms was therefore required; they urged the implementation of policies to that end. In other words, the Interim Recommendations represented a position fundamentally different from those that called for correcting market failures through a partial substitution of policy measures for market functions. The Recommendations also expressed a new approach to policies on industrial structure. The premises underlying the Recommendations differed from those of the oil crisis and the high-yen recession eras. First, whereas policy had previously targeted capital-intensive basic materials industries, a wider range of industries, including machinery and non-manufacturing industries, were now included in its scope. Second, because the assumption had been of a domestic market with low import-penetration levels, the previous approaches to price recovery were joint operations and the elimination of excess capacity, but as the premise shifted to an internationally open market, companies were seen as having to come to their own judgments about making adjustments to production. Third, whereas it had been possible in the past to anticipate which growth industries might replace declining industries, it was no longer clear what such growth industries would

be. The policies on industrial structure adjustment therefore did not call for direct government participation as they had in the past but instead emphasized the need for corporate restructuring and the establishment of an environment that would enable the creation of new industries.

The September 1994 “Industrial structure of the 21st century” was based on these Interim Recommendations and served as a manifesto on industrial policy from the 1990s to the 2000s. The report clarified the new position as follows:

Henceforth, rather than accepting various systems and regulations as given, we must strengthen market functions by bringing neutrality to the system. This requires an emphasis on setting general rules, deregulating, and rectifying practices in the private sector, and then implementing various assistance measures as necessary. We must also strengthen the idea of actively engaging in the formation of an efficient market based on principles of self-help.

The perspective of the Industrial Structure Council and MITI on the role of industrial policy had clearly shifted from an approach of responding to market failures to one of enhancing market functioning through institutional reform.

## **2 Changes in Economic Structure and Regulatory Reform**

### ***2.1 The Revised Antimonopoly Act and the System of Business Laws***

The June 1993 Interim Report by the Fundamental Issues Subcommittee marked a major shift in the issues addressed by policies on industrial organization. As mentioned in the previous section, the Report pointed out that in order to promote creative business activities, an environment had to be created that would do away with obstacles to market competition, or that would strengthen the capital market’s function of curbing such obstacles. International issues, specifically the Structural Impediments Initiative (SII) talks, also generated a need for policies on industrial organization, and MITI pursued organizational restructuring and established various research groups to strengthen research, analysis, policy planning, and design functions in order to address the desired economic structural reform (Okazaki 2012, p. 291).

The first of these involved a review of the holding-company regulations under the Antimonopoly Act (AMA) and of the regulatory system pertaining to shareholding by large companies. Successive proposals in the mid-1990s called for abolishing or reviewing Sect. 9 of the Antimonopoly Law (regulations on pure holding companies) and 9–2 (restrictions on stock-holding by large companies) on the grounds that they were obstacles to business strategy development. From around 1994, the Government planned a review of antitrust policies as part of its overall policy of deregulation, and the Cabinet Decision titled “On the promotion of deregulation” included a review of appropriate regulations of holding companies and guidelines on venture capital in FY 1994. Furthermore, in response to the “deregulation action program” scheduled for formulation by the end of FY 1994, the business community demanded the abolition

of Sects. 9-2 of the AMA, arguing that it constrained the development of domestic business by restricting acquisitions of companies through mergers and acquisitions of shares and by limiting the establishment and nurturing of subsidiaries with the aim of diversification.

Following a review of Sects. 9 and 9-2, the Corporate Law Study Group, established by MITI, submitted the “Recommendations on the pure holding-company regulation and the review of holding regulations on large-scale companies” in February 1995, including: (1) the realization of efficient corporate organization appropriate for diversification and multinational development, as well as smooth personnel and labor management, (2) harmonization with international legal systems, and (3) expectations that corporate governance would avoid friction in organization and personnel matters. It also stated that the elimination of regulations on large companies’ shareholding would (a) facilitate investment in new businesses, and (b) enable the smooth restructuring of industry. The report accordingly concluded with a strong call for the revision of existing articles that hindered these effects.

The government issued a Cabinet Decision on a “deregulation promotion plan” in March 1995, and the Antitrust Law Enforcement Order was revised in April, limiting the number of large-scale corporations subject to Article 9-2 shareholding restrictions. In November, the FTC also established the AMA Chapter 4 Revision Review Committee and started discussing the holding company problem, producing a report in December with reconsiderations it regarded as appropriate. Although the FTC bill formulated at this time was not realized, the government’s interest in economic structural reform grew rapidly with the establishment of the Ryutaro Hashimoto Cabinet in November 1996, including MITI’s program for realizing the reform of corporate organization. A cabinet decision to that effect was made in December and the revised bill was enacted in June 1997.

Although Article 9’s general rules on excessive concentration remained, the types of prohibited holding companies were clearly delineated in the amended AMA. Prohibitions were imposed in cases where there were (1) large-scale corporate groups or separate large-scale companies in each of a sizable number of major business sectors; (2) businesses with close non-business financial ties to large-scale financial companies; or (3) different powerful operators in each of a considerable number of major business fields that had mutual relevance to one another. Additionally, regulations under Sect. 9.2 were considerably relaxed. Specifically, holding companies were exempted from the provisions applied to large companies. In other words, the “total stockholding rule” was not applied to holding companies and their subsidiaries. Also expanded were the types of shares exempted from application of the law.

These two revisions had the following significance from the point of view of company group management. First, while Article 9 applied only to holding companies, holding companies were excluded under Article 9.2 and the stocks of wholly owned subsidiaries were newly exempted. This meant that in cases where large-scale companies expanded their enterprises through the establishment or acquisition of wholly owned subsidiaries, they might not be subject to either section. Exceptions were also made in cases where joint venture companies were established for purposes such as

joint research and where venture capital lists acquired shares from entrepreneurs in the form of subsidiary businesses.

The FTC pointed out that the lifting of restrictions on holding companies was an “amendment designed to turn certain types of excessive regulation into the minimum regulation necessary under the Antimonopoly Act,” expressing its interpretation of the AMA revision as consistent with overall deregulation. From MITI’s perspective, the lifting of restrictions on holding companies was intended to contribute to the promotion of economic structural reform by expanding the range of possible types of corporate organizations, thereby creating new businesses and improving the efficiency of existing businesses. In addition, the review of the regulations on shareholding by large-scale companies was regarded as contributing to the revitalization of the economy by eliminating the restrictions on large companies and generating the growth of venture businesses. Underlying these ideas was an awareness of the decline in Japan’s economic vitality due to declining competitiveness and a reduced labor force accompanying a low birth rate and an aging society; and of the need to create an environment for businesses that would be internationally appealing and that would enhance corporate creativity and vitality.

Among efforts to reform the economic structure was the need for a review of Commercial Law regulations on merging and splitting companies. This was to be separate from the AMA amendment review and would include the review of provisions for splitting off companies and establishing the so-called company split system (Okazaki 2012, p. 318).

The Industrial Structure Council’s Basic Issues Subcommittee report published in June 1994 included the following as policy issues: “policies providing for corporate splits,” “simplification of merger procedures” and “simplification of business transfer procedures” under Commercial Law. In response to this report, MITI established a Commercial Law Study Group, which met for discussion repeatedly. In July 1996, MITI issued a “Research Report on the Merger System under Commercial Law” and a “Research Report on Issues Relating to Corporate Splits.” The former (1) called for the abolition of the general meetings to report mergers and, in order to compensate for any insufficiency of information that would result, considered to require more thorough disclosures about mergers; (2) highlighted the need for advertisement of the contents of the merger so as to enable creditors to decide whether there were any points of dispute, but the process would be simplified; (3) considered the introduction of simplified merger procedures, and so on. These points were realized beginning in 1997 with the amended Commercial Law (adopted in June, implemented in October). Meanwhile, the Study Group on Corporate Law, reestablished in September 1996, reported on the results of its deliberations in July 1997 in “Towards the reform of systems related to corporate organization: Report of the Study Group on Corporate Law.” Some of its recommendations led to the establishment of a share exchange system through the August 1999 amendment of the Commercial Code.

As shown in Table 1, the changes made in the direction of MITI policy in order to harmonize industrial policy with the AMA led to a decrease in the number of cases of “exempted cartels,” previously a major means of exercising industrial policy. Few rationalization cartels were instituted as of 1980, and in parallel with this, cases

**Table 1** The number of exempted cartels

Type	Underlying laws	Applicable industries	Number of cartels			
			1970	1980	1990	2000
General cases	AMA24-3 recession cartels	General production	0	1	0	0
	AMA24-4 rationalization cartels	General production	10	1	0	0
SME-related	Laws related to the organization of SME associations	Industry associations	364	267	174	0
	Act on temporary measures concerning the stability of specified SMEs	Commercial associations	105	0	0	0
	SME stability law	Commercial associations	105	0	0	0
Trade-related	Import and export act	Export transactions by exporters	133	44	28	0
		Export-oriented domestic transactions by producers and dealers	68	15	11	–
		Export-oriented domestic transactions by exporters and export associations	5	0	0	–
		Import transactions by importers	4	4	1	–
		Trade associations	8	7	3	–
		Subtotal	218	70	43	0

(continued)

**Table 1** (continued)

Type	Underlying laws	Applicable industries	Number of cartels			
			1970	1980	1990	2000
Manufacturing-related	Temporary measures law on specified industrial structure improvements	Specified industries	–	8	–	–
	Act on temporary measures for the promotion of the machinery industry	Specified machinery industries	16	–	–	–
	Act on temporary measures for the promotion of the electronics industry	Specified electronics industries	1	–	–	–
	Act on temporary measures for the promotion of specified machinery and information industries	Specified machinery and information industries	–	1	–	–
	Act on temporary measures for fertilizer price stability	Fertilizer manufacturing industry	2	3	–	–
	Act on temporary measures for textile industrial equipment	Specified textile industries	3	–	–	–
		Subtotal		22	12	

Source Okazaki (2012, pp. 238–239)

Note AML Antimonopoly Act; – shows lack of stipulations permitting cartels or lapse of laws

of Exclusions of Application of the Antimonopoly Law outlined in the Temporary Measures for the Promotion of the Machine Industry and Temporary Measures Law for the Structural Adjustment of Specific Industries (“Structural Improvement Law”) were completely absent as of 1990. Cartels relating to small business relationships and Export and Import Transaction Law were also abolished by 2000. The relationship to the AMA is clear in the fact that the principle of competition became the underlying philosophy guiding policy.

## ***2.2 Respect for Corporate Autonomy and the Role of Government***

### **2.2.1 “New Market Creation Program (Program 21)”**

Promoting the creation of new industries became a pillar of comprehensive economic policy in February 1994, and MITI in response announced the “New Market Creation Program (Program 21)” in March (Okazaki 2012, p. 128). The basic concepts were: (1) to respect the subjective judgments made by economic entities under market mechanisms, (2) to administer cross-sectorial policy responses to problems not resolved by the efforts of individual enterprises, and (3) to define “market sectors responding to social needs.” These referred to sectors where potential domestic demand might be strong, but where either autonomous development pathways were lacking, or the market mechanism was imperfect due to external factors or the public nature of the sector. The task was to develop policies to support these sectors. Programs were presented in concrete terms for eight promising fields, based on projections of the future and related measures. These programs were steadily implemented, with an emphasis on actively connecting and cooperating with the other related ministries and agencies.

The June 1994 “Report of the Subcommittee on Basic Issues,” issued a decision to devise prototypes for the policy system for creating new industries and improving the business environment, with the “Program 21” concept in mind. The number of promising fields was expanded to 12, and the cross-sectorial issues facing Japanese industry were presented as follows: (1) the need to pursue systematization, with an aim at mutual and synergistic development of hardware and software services; planning, development, procurement, production, sales, and distribution; public and private sector, and so on, (2) the need to pursue a global division of labor, and (3) the need to increase productivity in non-tradable goods and to reduce the domestic and foreign price gap. The foundations for this thinking date back to the July 1990 *Vision of the 1990s*. The ideas of “emphasizing market principles and self-responsibility” and “developing integrated policies internally and externally” aimed at international expansion were the inheritance of the basic stance of the *Vision*, and the inevitable need for the extension of industrial policy administration had, moreover, already been pointed out in the *Vision* as well.

The new business support measures emphasized as policy issues were promoted through the expansion of loan systems by government financial institutions, improvements in the operation of the Law on Temporary Measures to Facilitate Specific New Businesses, and improvements of the environment for funds through a strengthening of the operations of various support organizations. To strengthen support for research and development, the Ministry of Education and the Science and Technology Agency cooperated on budget increases in FY 1995. Efforts to develop new industrial infrastructure to serve as the foundation for new business and new industry development were carried out through improvements in the operation of related laws, beginning with the Private Participation Promotional Law (hereafter, the “Private Promotion Law”). In addition, the Science and Technology Basic Law was enacted in November 1995, aiming at planned support for science and technology, while support for venture companies was procured through financing, the securing of human resources, and similar measures.

### **2.2.2 The Law on Temporary Measures to Facilitate Business Innovation**

In response to concerns over the growing gap between domestic and foreign prices and about the hollowing out of industry in the first half of the 1990s, the Industrial Policy Bureau began, around October 1994, to conceive a new law aimed at structural adjustment. The project pointed out that overseas relocation was advancing even in key industries such as processing and assembly, in which Japan had previously been internationally competitive in productivity and technical capability. This change had come about because of (1) increases in basic costs due to poor regulation and trading practices, the appreciation of the yen, and the persistence of inefficient industries, and (2) the rapid growth of Asian countries and severity of international competition. The Industrial Structure Council’s Subcommittee on Basic Issues echoed the view that regulations and institutions were impeding the shift of the industrial structure.

Based on this recognition, the Law on Temporary Measures to Facilitate Business Innovation (“Business Innovation Law”) was enacted in March 1995 (Okazaki 2012, p. 74). The core of this law was the Business Innovation Plan. “Designated enterprises” were able to obtain approval by submitting business innovation plans alone or jointly to the appropriate minister. Specific business operators were classified within “specific industries,” meaning industries belonging to mining or manufacturing sectors where production and employment were likely to decrease due to changes in the domestic and foreign economic environments, or due to retailers or wholesalers closely related to them, or in other words those engaged in a business specified by Cabinet order. As in the facilitation law, companies were eligible for support, and the rates of increase in performance (Total Factor Productivity (TFP) and labor productivity) of designated companies increased from 1996 on, showing rates of improvement different from those of non-designated companies.

### **2.2.3 Action Plan for the Reform and Creation of Economic Structures, and the Creation of New Industries**

Subsequently, the second Hashimoto Cabinet, established in November 1996, made the “five reforms” its top priority (Okazaki 2012, p. 155). The five were: (1) administrative reform, (2) economic structural reform, (3) financial system reform, (4) social security structural reform, and (5) fiscal structural reform. Education was later added as a sixth area for reform. Importantly, economic structural reform emphasized the creation of new industry sectors as the key to dealing with hollowing out of industry. Prime Minister Hashimoto instructed MITI Minister Shinji Sato to formulate and promote economic structural reform plans to restore the vitality of the Japanese economy in order to put this policy in concrete terms. MITI was to be at the center of this effort and to give instructions for coordinating with the other ministries and agencies. Minister Sato accordingly gathered the staff of the Headquarters for Industrial Structural Conversion and instructed them on coordinating their work with the other ministries. Through these efforts, the Program for Change and Creation of Economic Structure was created by Cabinet Decision in December.

This program acknowledged the need for institutional reform, and with regard especially to the imminent aging of Japanese society, conceived of 15 new industrial fields, and presented an overall view of economic structural reform as a means for creating these. The contents of the program were: (1) rectification of the high-cost structure, (2) reform of various systems relating to corporations, (3) reform of the labor and employment system, (4) improvement of social infrastructure that contributed to economic structural reform and improvement of efficiency in its utilization, and (5) maintenance and development of regional industry and of the skills needed to support manufacturing. Among these, the first required drastic deregulation, improvements in the commodity futures market, improvements in business practices, and systems reform for standardization. The second emphasized the need for optimization of managerial resources such as human resources and capital, by strengthening the development of spin-offs and group management, and reorganizing corporate structures through business restructuring such as mergers and joint ventures, which required reconsideration of the Antimonopoly Act’s regulations on business combinations and of company merger procedures.

In line with this Cabinet Decision, a further Cabinet Decision was taken in May 1997 called the “Action Plan for Innovation and Creation of Economic Structure,” in which concrete projections and policies were presented regarding each of the 15 new industries (Okazaki 2012, p. 159). It was assumed that these fields, which employed approximately 10.66 million people at that time and had a market size of approximately 198 trillion yen, would grow to 18.27 million employed and 561 trillion yen by 2010. The three sectors related to medicine and welfare, lifestyle, and information and communications were expected in particular to contribute greatly to the expansion of employment (Table 2).

The Keizo Obuchi administration, established in July 1998, froze the Special Measures Law on Promotion of Fiscal Structural Reform approved by the Hashimoto Cabinet in December 1997 but carried on other reforms. The Economic Strategy

**Table 2** Forecast on employment and market size in new industry fields (1996)

Industry sector	Employment (10,000 people)		Market scale (trillion yen)	
	Current	2010	Current	2010
Medical, welfare	348	480	38	91
Lifestyle	220	355	20	43
Information and communications	125	245	38	126
New product technologies	73	155	14	41
Distribution, logistics	49	145	36	132
Environment	64	140	15	37
Business support	92	140	17	33
Oceans	59	80	4	7
Biotechnology	3	15	1	10
Urban environmental improvement	6	15	5	16
Aerospace (private sector)	8	14	4	8
New energy, energy conservation	4	13	2	7
Human resources	6	11	2	4
Internationalization	6	10	1	2
Housing	3	9	1	4
Total	1066	1827	198	561

Source Okazaki (2012, p. 166). Source data from the Cabinet decision titled “Programs for changing and creating the economic structure” 1996

Council, reporting directly to the Prime Minister, was established in August, and decided on a policy of drawing up “plans for doubling living space” and “plans for revitalizing industry.” To this end, deregulation was needed in the 15 new sectors that were to lead the Japanese economy, as well as support for new businesses. MITI played a central role in formulating the industrial revitalization plan. As far as economic structural reform was concerned, MITI would therefore be responsible for a cross-sectional approach to the various sectors administered by each department in the Ministry.

The industry-related legislation for creating and developing new business was based on the May 1998 Law Promoting Technology Transfer from Universities to Industry (“TLO Law”), and support measures were devised with the aim of transferring the results of research, as the law’s name suggests. Meanwhile, the December 1998 Law for Facilitating the Creation of New Business led to (1) direct support for the establishment of individual businesses and companies, (2) promotion of business activities by SMEs using new technologies, and (3) measures based on three points of improvement of the business environment, utilizing regional industrial resources. The same law was amended to add support measures for venture companies in December 1999.

Meanwhile, the economic revival plan stressed the need to raise productivity. The lack of improvement in productivity was ascribed to distortions in the corporate production and accumulation structure that had resulted from the inefficient investments of the bubble era. The supply side needed to be addressed and systemic reforms posed to support the processing of excess capacity and to bring innovation to business organization. Following deliberations by the Council for Industrial Competitiveness established in March 1999, the Law on Special Measures for Industrial Revitalization was enacted in August. Its aim was to raise productivity through the efficient utilization of existing management resources in Japan. To achieve this, the decision was made to support business restructuring, the opening of new areas of business (targeting entrepreneurs and SMEs), and research activities. Designated businesses would be able to receive special exceptions to the Commercial Law and special measures on financing and taxation.

## **2.3 Promoting Deregulation**

### **2.3.1 Implementing Plans to Promote Deregulation**

Deregulation proceeded also under the pressure from the United States in the form of the Structural Impediments Initiative of 1989 and the US–Japan Framework for a New Economic Partnership established in April 1993. The Provisional Council for the Promotion of Administrative Reform, established in July 1990, confirmed the implementation of the Second Administrative Reform Council’s Final Report, and proposed to reduce public regulation by half over a period of 10 years (Okazaki 2012, p. 196).

Deregulation was sought also from the point of view of reforming Japan’s long-stagnant economic structure. Following the Third Administrative Reform Council Report of January 1994, the government established the Administrative Reform Promotion Office in the Cabinet to undertake important matters concerning implementation of administrative reform in government and other necessary related matters. Based on the same report, an Administrative Reform Committee was established in the Prime Minister’s Office in December 1994 with the role of monitoring the implementation of policies aimed at (1) promoting regulatory improvements related to private sector activities, and (2) promoting improvements in administrative systems and operations. The administrative reform councils of the Extraordinary Administrative Investigative Committee and Third Council were in the position of responding as advisers to the Prime Minister, whereas this committee was an organization that actively and autonomously carried out monitoring and deliberations.

With the support of powerful organs such as these, a medium-term deregulation promotion action plan was formulated. In March 1995, the Cabinet issued the “Deregulation Action Program” Decision, a five-year plan covering 1995–1999. This plan addressed 11 sectors, establishing a deregulation implementation schedule for each: (1) housing and land, (2) information and communication, (3) distribution and related

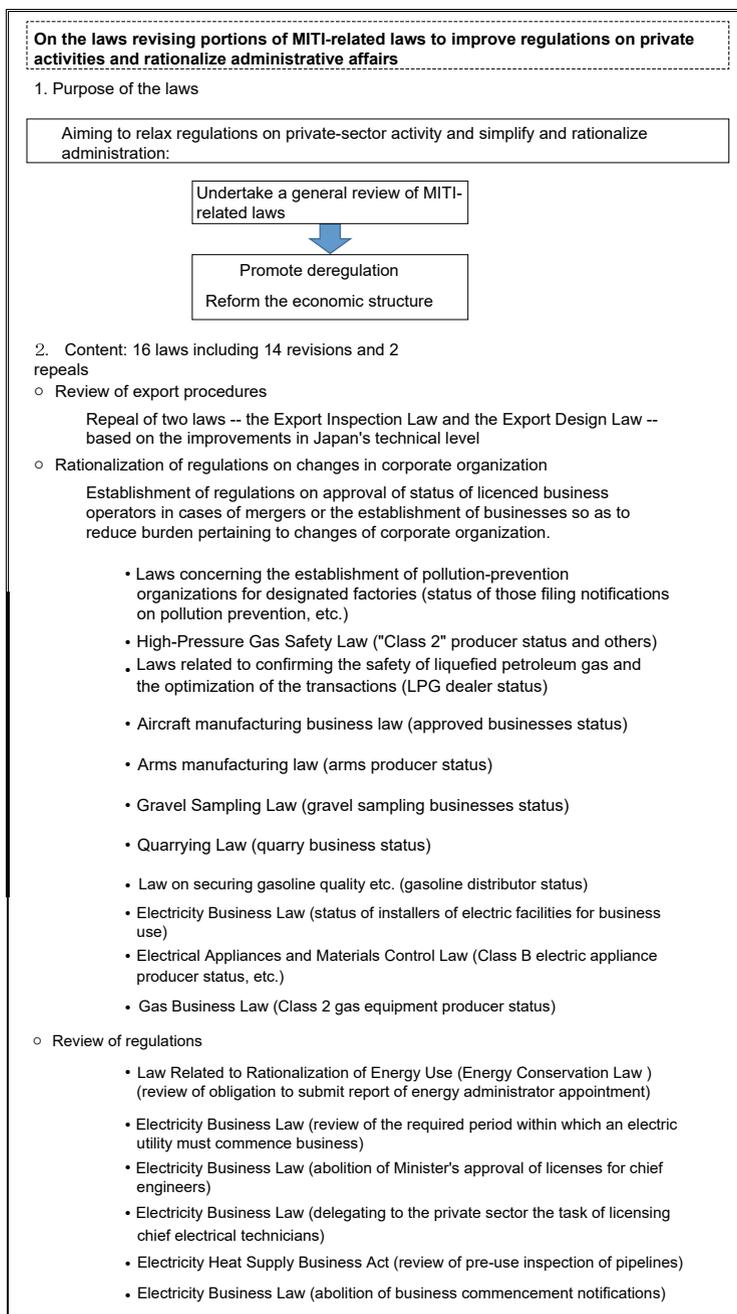
activities, (4) transportation, (5) standards, certifications, imports, and so on, (6) finance, securities, and insurance, (7) energy, (8) employment and labor, (9) pollution and waste products, (10) environmental protection and dangerous goods, disaster prevention, and security, and (11) others. Deregulation was applied to a total of 1,091 items, and with the establishment of new regulations, a fixed period for review was sought. However, the planning period was revised within three years, by FY 1997, because of the rapid appreciation of the yen (Fig. 1).

The administrative reform committee issued a “Final opinion” ahead of the December 1997 expiration of the planning period, which the Cabinet adhered to in its decision entitled “Promotion of Deregulation.” This dictated the continuation of the deregulation plan. Another Cabinet Decision, “Three-year Program for the Promotion of Deregulation” (“New Plan”) was released in March 1998. Two months earlier, a deregulation committee composed of private-sector experts was established under the Administrative Reform Promotion Headquarters. The “New Plan” was distinctive in that it included the idea of switching from administration based on “regulation in advance” to one of “after-checks.” Whereas the former was characterized by “direct regulation of citizens and businesses,” the latter was a form of administration in which “the government establishes clear and concrete rules and the private sector is permitted to act creatively and freely as long as it observes those rules.” Deregulation did not end with this shift, but the plan was significant in showing the need to clarify the rules and strengthening the system of after-checks based on them; and as suggested by the Deregulation Committee, which in April 1999 was renamed the Regulatory Reform Committee, it aimed to advance the thrust of policy from deregulation to regulatory reform.

The deregulation policy described above led to changes in the number of licenses as shown in Tables 3 and 4.

### **2.3.2 Product Standardization and Safety Improvements**

Based on the December 1997 Cabinet Decision titled “Follow-up on the ‘Action Plan for Innovation and Creation of Economic Structure,’” which sought to minimize government regulations, the Standard Certification Committee was established the following June in the Industrial Structure Council. The Committee prepared a report in January 1999, which sought to utilize the power of the private sector for inspection and verification work (Okazaki 2012, p. 196; Ishihara 2011, p. 341). In August, revised versions of 11 of the 18 laws using MITI’s Standards and Conformity Assessment System were established, and the government’s certification system based on the Consumer Product Safety Law was abolished. Preliminary regulations were minimized while emergency orders regarding the distribution of dangerous products were maintained, and measures for post-checks were enhanced, whereby businesses became responsible in principle for ensuring the safety of their products. Government’s role was to form the safety rules.



**Fig. 1** Laws on Deregulation. *Source Tsusansho Koho, Fig. 3.1, April 1, 1995 [II-2, p. 327]*

**Table 3** Changes in the number of licenses, by purpose, 1986–1998

Type	Purpose							Total		
	Licenses, etc.	Repeal of regulations	Establishment of new regulations	Citizens' life and property	Welfare	Resources/environment	Business activities		Industry promotion	Other
Strengthening of regulations		Repeal of regulations	Establishment of new regulations	11	0	16	10	0	0	37
		Establishment of new regulations	Repeal of regulations	499	35	222	307	3	16	1082
Relaxation of regulations		Repeal of regulations	Establishment of new regulations	433	213	19	1797	0	41	2503
		Establishment of new regulations	Repeal of regulations	322	131	28	1804	109	73	2467
Other		Repeal of regulations	Establishment of new regulations	56	39	41	464	139	233	972
		Establishment of new regulations	Repeal of regulations	118	185	57	293	400	437	1490
Total		Repeal of regulations	Establishment of new regulations	500	252	76	2271	139	274	3512
		Establishment of new regulations	Repeal of regulations	939	351	307	2404	512	526	5039

Source Okazaki (2012, p. 206)

**Table 4** Number of licenses, by Ministry/Agency

Ministry or agency	Number of licenses	
	Dec., 1985	Mar., 1999
Prime minister's office	27	32
Fair trade commission	26	28
National public safety commission	81	139
Financial revitalization commission	–	1003
General affairs agency	29	35
Hokkaido regional development agency	26	31
Defense agency	26	31
Economic planning agency	26	45
Science and technology agency	218	308
Environment agency	149	221
Okinawa development agency	27	34
National land agency	81	100
Justice ministry	146	196
Foreign ministry	37	47
Finance ministry	1116	844
Education ministry	310	394
Health ministry	936	1322
Agriculture, forests, and fisheries ministry	1263	1376
Ministry of international trade and industry	1870	1726
Transport ministry	2017	1505
Postal ministry	265	381
Labor ministry	532	682
Construction ministry	742	976
Home affairs ministry	104	125
Total	10054	11581

Source Okazaki (2012, p. 203)

Regarding the issue of business responsibility and redress for victims of accidents, as mentioned in Chap. 2, the Consumer Protection Committee had repeated discussions since the 1970s on product liability from the perspective of consumer redress. Some in industry and in MITI regarded any priority given by administration to consumers as jeopardizing business, and little progress was made on legislation, but the government could not continue to neglect the issue, as it was forced to handle actual accidents. The result was the *1990s Vision's* recommendation that a product liability system be taken under consideration, and when the Product Safety Division of the

Industrial Structure Council recommended introducing the product liability system as a comprehensive product safety measure in November 1993, MITI decided to proceed with preparations for legislation. Discussions were carried on for two years within the Ministry and by the Product Safety Division on such difficult issues as what constituted corporate responsibility, the extent of consumer responsibility, and how to set the standards. Rulings gradually became more objective, which spurred further legislation. The Product Liability Law was established in July 1994, stipulating that product liability claims could be brought where there was (1) a defect regardless of intent or negligence, (2) damage, and (3) a causal relationship between the two. This constituted a major revision of the principle of negligence established in the 1896 Civil Law, but given the increased likelihood that product quality labeling would receive greater emphasis due to the law, product liability law proceeded without government regulation, on the principle that responsibility resided with the business operator.

Seen as part of the deregulatory trend, this form of consumer administration did not regard consumers as weak players in need of protection, but rather positioned them as economic entities equivalent in strength to business entities, and therefore minimized preliminary regulation and instead called for consumers to take responsibility for themselves. It therefore also increased the need for information disclosure so that consumers could make appropriate decisions. This became a driving factor in the establishment of the Consumer Affairs Agency in September 2009.

### 2.3.3 Service Industries

The *1990s Vision* released in September 1989 reiterated the importance of the service industry (Ishihara 2011, p. 430). The goals for the service industry in the 1990s were defined as: (1) the upgrade of labor productivity, (2) promotion of human resource development in fields such as the information service industry and the leasing industry that contribute to advances in manufacturing as well as improving labor productivity, and (3) establishing the environment for development to respond to the upgrade and diversification of the lifestyle needs of the public. The latter included services to support women, such as elder care and child and household care services.

In connection with the deregulation presented by the Hiraiwa Report of the Economic Reform Study Group in November 1993, MITI in 1995 established a Soft Industry Roundtable under the Director-General for Commerce and Distribution Policy, which issued its report in May 1996. It defined “soft industries” as a group of industries with the main objective of providing intellectual value and services. According to the report, the specific fields where growth could be expected were (1) business support, (2) information and communications, (3) human resources, (4) welfare, (5) lifestyle and culture, and for these to develop, development of a market environment based on the principle of competition. MITI was thus seeking ways to contribute to the development of the service industry outside the jurisdiction of the Ministries and Agencies, while adhering to the government policy of deregulation and regulatory reform. However, while these administrative processes promoted

a competitive market approach, they also had limitations in that they delayed the development of policies for improving productivity.

## ***2.4 Abolition of the Large-Scale Retail Stores Law***

### **2.4.1 Negotiations with the United States and the Large-Scale Retail Stores Law Issue**

Amidst worsening economic friction with the United States, the Office of the United States Trade Representative (USTR) asserted the existence of non-tariff barriers in Japan. Regarding distribution, the US urged improvements in the Law Concerning the Adjustment of Retail Business Activities by Large-Scale Retail Stores and in business practices that were seen as barriers to import expansion. The “Report on relaxation of public regulations, etc.,” submitted by the Temporary Administrative Reform Promotion Council in December 1988, included the following findings on the Large-Store Law: (1) that “preliminary explanations” should be limited to preliminary explanation of the plan for opening a store, (2) that the Commercial Activities Coordinating Committee, composed of the commercial businesses, consumers, and experts, should adopt standard time limits for preliminary deliberations, (3) that criteria for closing times and number of days off should be determined from the point of view of improving convenience for consumers, and (4) that excessive regulation by local governments should be alleviated. In December 1988, the Cabinet issued a decision to undertake implementation of these suggestions, but in the *1990s Vision on Distribution* compiled by the Distribution Committee and the SME Policy-Making Council in June 1989, MITI decided to incorporate recommendations concerning distribution into its new administrative reform proposal and to work out countermeasures (Ishihara 2011, p. 99).

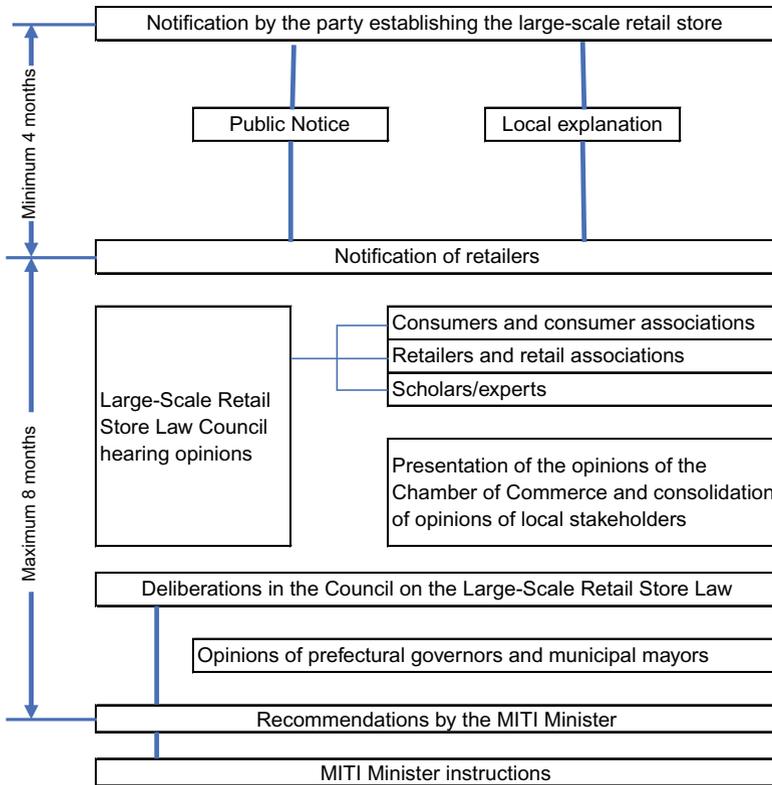
While this review of the Large-Store Law proceeded domestically, the question of how to optimize operation of the Large-Store Law was also taken up in the discussions on the Structural Impediments Initiative (“Structural Consultations”) that began in July 1989. In the final report of the Structural Consultations submitted in June 1990, the Large-Store Law was addressed as the first among the items for deregulation, with the decision that deregulation measures would be undertaken in the following three stages: (1) immediate measures (measures for optimization of operations and so on), (2) legislative reform for submission in the next ordinary Diet session, and (3) review after the revision in the Law stipulated in (2) above. The first stage, launched in May 1990, included: shortening the coordination and processing period of establishing new shops, special measures on spaces for buying and selling imported goods, establishment of store area limits in which coordination was not required, relaxation of the scope of regulation related to closing hours and number of holidays, and improvements in the transparency of the coordination and processing procedures for opening stores. These measures, mainly intended to shorten the coordination process, constituted a concrete form of the policy suggested in the *1990s Vision on*

*Distribution*, but, with the incorporation of the content on imported items, were also a response to the Structural Impediments Initiative.

Another joint meeting was held between the Industrial Structure Council's Committee on Distribution and the Subcommittee on Distribution of the SME Policy-Making Council to discuss revision of the law. Their December Interim Report sought the following revisions: that store-opening coordination should take place within one year and that the store-opening notification and preliminary explanations contained in the store-opening coordination and processing procedures should be abolished. The Report further urged that the goal of "local explanations" should no longer be to reach agreement with the community, but rather to notify the community of the content of the plans. Other suggested revisions included abolishing the Commercial Activities Coordinating Committee, replacing it with hearings of opinions from consumers, retailers, academic experts, and others by the Large-Scale Retail Stores Council (Large-Store Hearings), and making it allowable to ask local chambers of commerce and other organizations to consolidate the opinions of local stakeholders as needed. The recommendations also called for relaxing special measures on places where imported goods could be sold and for urging local government bodies to exercise restraint in issuing regulations.

The revised law was promulgated in May 1991 (and implemented in January 1992) based on the interim report and was divided into three categories: (1) expanding the area (space) limits for each type of store, (2) expanding the scope of the Large-Store Hearings, and (3) undertaking a review after two years (Ishihara 2011, p. 110). The abolition of the Commercial Activities Coordinating Committee meant that a weighty responsibility was imposed on the judgments issued by the Large-Store Council. For this reason, the Large-Store Council revised its review procedures in November 1991. The revisions maintained the aim of protecting small and medium-sized retailers, as before, but also sought to respond to the diversification and internationalization of consumer needs. In addition to the revised law, the Special Law on Exceptional Measures Concerning Floor Space for Import Sales was established, according to which the Large-Store Law would not apply when the total selling space for imported goods was 1,000 square meters or less (Fig. 2).

The Industrial Structure Council established a Basic Issues Subcommittee in October 1992 to launch a review of the revised law, submitted the final report in June 1994, and sought further relaxation of the regulatory standards in the Large-Store Law. These decisions were based on the mounting view that the reduction of small and medium-sized retailers was due increasingly to structural problems rather than to the advancement of large-scale stores. Moreover, the abolition of the Commercial Activities Coordinating Committee meant that the opposition movement of small and medium-sized retailers lost its home base and that calls for stronger regulations were increasingly eclipsed. Meanwhile, before the two-year review required by the revised law, the joint conference meeting in November 1993 issued an interim report in January 1994 titled "How to undertake the review of the revised Large-Store Law." Many different views were reportedly presented in the joint conference on the need, or lack thereof, for the Large-Store Law, but given that the coordination procedures under the Law were proceeding smoothly after the revision, it was judged that there



Source: Ministry of International Trade and Industry, Industrial Policy Bureau, Distribution Industry Division, ed., "The future of the Large-Scale Retail Store Law -- How to consider its revision [Industrial Structure Council and SME Policy-Making Council Joint Conference Report]." Industrial Research Council Foundation, 1994, p. 127. Regarding cases of Type II Large-Scale Retail Stores, "Prefectural Governor" replaces "MITI Minister."

**Changes to the Large-Scale Retail Store Law**

- (1) Increase in retail space area for each type of store (related to Article 3)
- (2) Expansion of range of opinions to be heard by the Large-Store Council (related to Article 7)
- (3) Optimization of self-regulation by local public entities (related to Article 15-5)
- (4) Review to be undertaken after 2 years (related to Article 2 of Supplementary Provisions)

**Fig. 2** Store-opening procedures under the Large-Scale Retail Store Law for Type 1 Large-Scale Retail Stores (January 31, 1992 to May 3, 2000). *Source* [II-4, p. 114]

would be little merit in abolishing the framework itself. Although the coordination issue had receded, the choice was made to retain the legal framework itself. Even so, in part because of Japan–US friction, the Large-Store Law was gradually dismantled.

### 2.4.2 Shifts in the Direction of Distribution Policy

The *1990s Vision on Distribution* calling for the deregulation of the Large-Store Law defined the goals of distribution policy as: (1) realization of a truly affluent consumer life, (2) contribution to the development of the international economic society, (3) contribution to the construction of vibrant local economic society, and (4) securing management resources for an appealing distribution industry (Ishihara 2011, p. 229). The last of these involved both making the competition mechanism work effectively and recognizing the need to consider business opportunities for small and medium-sized businesses. Nine specific areas of policy administration were stipulated to achieve these policy goals: (1) rationalization of the distribution system, (2) promotion of structural reform, (3) development of visions for revitalizing shopping streets (*shotengai*) and for community-building, (4) expansion of imports, (5) promotion of globalization, (6) improvement in convenience for consumers, (7) creation of high-quality life and the HighMart 2000 concept, (8) securing and training of human resources, and (9) improvement in the environment for labor. Among these, “promotion of structural reform” included suggestions on minimizing regulations on liquor, rice, and pharmaceutical products in the review of systems and practices. “Revitalizing shopping streets” meant actively supporting ambitious small and medium-sized retailers and enabling a smooth exit for older businesses. This indicates the *Vision’s* recognition of the fact that retailers who were aging and not interested in investing in the future were hindering the revitalization of regional commerce, particularly local *shotengai*.

The *1990s Distribution Vision* retained the spirit of its 1980s version precursor with its emphasis on regional commerce, but rather than relying on restrictions on large stores, it sought to actively develop regional economies while also encouraging the recovery of small and medium-sized retailers. The clear decrease in the number of small-scale retail stores raised doubts about the effect of the regulations based on the Large-Store Law and suggested that new support measures for regional commerce were needed.

Policy changes developed more rapidly after the SII talks. These changes were evident in the 1991 revision to the Large-Scale Retail Store Law and the Special Law on Floor Space for Import Sales, but also in the establishment of the Law on Special Measures Concerning the Promotion of Commercial Zone Improvement, the Private Participation Promotion Law, and the Law on the Promotion of Small and Medium-Sized Retailers. The third of these was conceived as seeking a new cooperative relationship between large stores and small and medium-sized retailers, with large-scale shopping centers as the paradigm. This aim was realized all at once after the final report on the SII talks sought significant increases in Japanese public investment. “Commercial zones” regulated “facilities offered for the use of entities that run a considerable number of businesses” (commercial facilities) and “a variety of facilities that promote the convenience of customers and other local residents” (commercial infrastructure) as “integrated facilities.” Municipalities were to formulate a concept, submit it for the approval of the prefectural governor and report it to the appropriate minister, and then receive support. This approach gave

municipalities the initiative in formulating the basic concept. It represented a new approach that would later be carried over into the City Core Revitalization Law and other policies. However, inasmuch as the basic direction of policy was determined by specific Ministers (of MITI, Construction, or Home Affairs), it focused on developing large-scale facilities, attracting an array of businesses, and maintaining roads and parks and so on. In other words, the national government envisioned plans for the major remodeling of urban areas through large-scale investments in “hardware,” but it was hard for municipalities to conceive plans on so large a scale. Thus, from the very planning stage, national government assistance in budget-planning and expert assistance proved indispensable.

The commercial zones defined under the Act were classified as either “Advanced Commercial” or “Regional Commercial Revitalization” zones. In July 1996, a third type was added, namely, the “City Core Revitalization Zone.” Regional Commercial Revitalization Zones received the greatest number of approvals, and the physical infrastructure intended to underpin not only retail but also commerce more generally, aimed in part at modernization of the retail sector. Nevertheless, understanding of the problems facing cities was as yet undeveloped and the tendency persisted to promote conventional approaches to retail.

### **2.4.3 Revision of Business Practices and Structural Reform**

As mentioned earlier, business practices were also among the non-tariff barriers emphasized by the United States as contributing to the trade imbalance (Ishihara 2011, p. 240). In June 1990, the Joint Meeting of the Industrial Structure Council’s Distribution Committee and the SME Policy-Making Council issued recommendations on reviewing business practices. These were based on the principles of (1) transparency of business practices, (2) the elimination of business practices that impeded the rationalization of business operations, and (3) a consideration of international perspectives. Specific items for review covered a broad array of issues, including rebates, returned goods, suggested retail prices and manufacturer’s invoice prices, and retail field service staff.

The report reflected not only a consideration of US concerns, but also the expectation that distribution businesses in Japan would be better able to expand internationally if they improved their business practices. In June, MITI announced a “Policy for the Improvement of Business Practices.” According to FY 1995 surveys, about 30–40% of companies were working on improving business practices before the introduction of the guidelines, while only 10–20% decided to do so afterwards. It was in this context that the changes to business practices such as “ex post facto” price setting by resin makers and processors, described below, were undertaken.

Meanwhile, in February 1991, the Joint Committee of the Industrial Structure Council Distribution Committee and the SME Policy-Making Council’s Subcommittee on Distribution established a Planning and Research Subcommittee Logistics Working Group to consider the problem of small-lot deliveries of consumer goods. In September that year, the Joint Committee established a Logistics Subcommittee

for the comprehensive discussion of logistics issues, and in October, it created a working group on SMEs to examine logistical problems particular to SMEs. The working group's report pointed out that small and medium-sized wholesalers were losing strength vis-à-vis their business partners because of the growing emphasis on flexibility, which meant demands for more frequent deliveries, shorter lead times, smaller orders, and stricter delivery times. The report suggested the need for policy measures such as infrastructure improvements and subsidies to improve the efficiency of individual business operators. The resulting May 1992 Law Concerning the Promotion of Efficient Distribution Systems in SMEs stipulated that cooperatives and other commercial groups were to prepare efficiency plans according to the basic guidelines set by the appropriate minister, and that grants and loans for their support would be provided to those that were approved. These efficiency improvements were limited to physical distribution operations such as the receipt of goods, storage, distribution processing, shipping, and ground shipping, because logistics was now recognized as fundamental to the process of making distribution more systematic. As compared with the policies on retail, these policies aimed to induce businesses to participate in these endeavors, something that was itself understood as a means to modernization.

Thereafter, in June 1995, the Joint Committee compiled a summary of “the current situation and issues in Japan’s distribution” and presented a distribution vision for the twenty-first century. The post-bubble recession only strengthened the demand for internationalization, and although deregulation was making progress, the hollowing out of core urban areas was becoming more pronounced. The report pointed out that this was a problem that transcended the issues of commerce and related directly to maintaining the vitality and liveliness of urban areas. The report called for policies both “from the point of view of seeking greater efficiency” and “from the point of view of social needs.”

#### **2.4.4 Abolition of the Large-Scale Retail Stores Law**

In June 1996, the US government expressed dissatisfaction with the direction of Japan–US negotiations on photographic film. In January 1995 it asked the WTO to consider whether the Large-Scale Retail Law was a violation of the General Agreement on Trade in Services (GATS), which had come into effect in January 1995 after the establishment of the WTO. Although the Japanese government attempted counter-arguments, a May 1997 Cabinet Decision called for investigation of the Large-Store Law, based on the fact that over two years had elapsed since the review of the latest revision (Ishihara 2011, p. 131). It is not clear when the policy of abolishing the Large-Store Law was adopted in the joint meeting of the ISC Distribution Committee and the SME Policy-Making Council's Subcommittee held that month, but the remarks published in October implied that the law should be abolished. The memo raised the question of whether the current legal framework could respond to the diversification of consumption activities accompanying changes in lifestyle. It also discussed how to respond to transportation and environmental problems caused by the opening of

large stores, and how to take decentralization into account in coordinating the issues related to the opening of large stores.

Underlying the exploration of a new framework was the idea that complete liberalization of large-store openings would be undesirable but that on the European and US model, location regulations could be implemented from the point of view of urban planning and land use (the guidance method). This can thus be interpreted as replacing the Large-Store Law's aim by securing business opportunities for small and medium-sized retailers through urban planning while continuing to maintain some degree of regulation on the opening of new stores. This shift to an urban-planning aim required the understanding and cooperation of the Ministry of Construction. Daily negotiations ensued at the secretariat level, while MITI considered concrete policies for finalizing the abolition of the Large-Store Law, revising the City Planning Act, and addressing environmental and other issues. A report requesting the abolition of the Large-Store Law was submitted in December. Although commercial associations initially submitted dissenting opinions, industry opinion gradually accepted the premise that the Law would be abolished and shifted toward assuring that the new framework function effectively. The Partial Revision of the City Planning Act was passed in May 1998, and the Law Concerning the Measures by Large-Scale Retail Stores for Preservation of Living Environment and the Law on Improvement and Revitalization of City Centers were enacted in June. With the enactment of the first of these, the Large-Store Law and the Special Law on Selling Space for Imported Goods were both abolished.

#### **2.4.5 Three Laws on Community Development**

The City Center Revitalization Law, Revised City Planning Act, and Act on the Measures by Large-Scale Retail Stores for Preservation of Living Environment, all established in 1998, aimed to promote a shift away from the Large-Store Law's controls on competition, toward a greater reliance on the principle of market competition (Ishihara 2011, p. 261).

The City Center Revitalization Law was based on a report compiled in August 1997 by the Joint Committee of the ISC's Distribution Committee and SME Policy-Making Subcommittee on Distribution, which emphasized the need for legal measures to address the hollowing out of city centers. It cited the need for multifaceted measures involving multiple government agencies, approaches that extended beyond isolated targets to address the links between them, respect for the distinctive character and autonomy of different places, and development of entities responsible for urban planning rather than the existing more scattershot approach. The law was implemented under the joint administration of 13 ministries and agencies. Its framework was as follows: the appropriate minister was to establish basic policy, municipalities to prepare basic plans based on that policy, and those implementing the projects stipulated in the plan to submit "specific project plans" and apply for certification by the appropriate minister. The "implementer" was to be a "certified initiative promoter," meaning a "Town Management Organization (TMO)." These would be funded by

commercial and industrial associations or the Chamber of Commerce, by special companies or local public associations composed chiefly of SMEs based on Cabinet Orders, or by contributions from a public service corporation. By obtaining certification, the TMO could obtain support from the national government. However, there were problems with this approach. Although municipalities launched TMOs to compete to obtain subsidies, many proposals were merely summaries of the existing business plans of various departments and had little new autonomous input. The framework of the law, while in step with the trend toward decentralization, increased the burden on local governments rather than otherwise. In some cases, therefore, local governments devised makeshift plans that could not produce any outstanding results. In April 2003, the TMO Roundtable of the SME Agency acknowledged that the TMOs were not necessarily making smooth progress; the Board of Audit also took up this issue in FY 2003. It was pointed out that neither the financial basis nor the necessary human resources for TMOs were sufficiently well developed and that TMO principles were not yet well understood.

The revised City Planning Act put into concrete form the policy goals that followed on the abolition of the Large-Scale Retail Law, namely those of encouraging and locating large-scale stores in accordance with urban planning methods. Based on this concept, the designation of special-use districts by Cabinet Order was liberalized to allow local public organizations to make the determinations for themselves, the point being to introduce large stores based on the actual circumstances of the area. The special-use areas, however, were not included in the purview of the suburban siting of large-scale stores in the model of the suburban shopping center promoted in the 1980s. The special-use area concept was therefore ineffective in suburban areas. In 2000, the Ministry of Construction revised the City Planning Act again to limit development not only in agricultural districts but also in areas not subject to land-use zoning. It was hard for municipalities to impose strict regulations on their own, however, and the advance of suburban development continued.

Although the Large-Scale Retail Store Location Law may be understood as a successor to the Large-Store Law, its purpose was completely different. The aim of the new law was not the securing of business opportunities for small and medium-sized retailers, but the maintenance of the living environment of area residents. MITI was asked to indicate what criteria should be included for the operation of this law, and SMEs asked that it incorporate in its consideration the matter of supply-and-demand adjustments. These expectations were not met, however; it was clear that the guidelines for criteria were not adjustment measures. At the Joint Committee meeting in November 1998 where the draft of the guidelines was compiled, two other points were at issue: how far the “living environment” extended, and the extent of traffic problems. Both were questions of how to require new stores to take the local environment into consideration. Joint Committee documents show that the emphasis was on making it the obligation of store owners to consider, on a voluntary basis, factors beyond just the three that were clearly regulated, namely traffic, waste, and noise. Companies were to develop their own responses to the issues. The new Large-Scale Store Location Law completely eliminated supply-demand adjustment measures, instead encouraging new shops to take environmental problems into consideration and to actively take on not only legal obligations but also issues of social responsibility and social contribution.

### 2.4.6 Review of the Three Laws on Community Development

The Joint Committee began evaluating and reviewing the three laws that comprised the community development system in April 1998 soon after their establishment (Ishihara 2011, p. 291). The further decline of central city areas spurred their work. Their December report indicates their viewpoint in reviewing the three laws and the direction of future town planning. The concerns highlighted by the Committee included: lack of attention in the Revitalization Law to the consolidation of urban functions, problems inherent in the basic planning and operations of the TMOs, the tendency under the City Planning Act to overlook broad regional perspectives while readily approving suburban development. The report accordingly stated that “sustainable municipal finance” and “preservation of the community” were important elements of the so-called *machi*, meaning “town” or “community,” and to these ends, called for efforts aimed at “developing compact and vibrant communities.” This thinking emphasized consolidation in urban cores rather than suburban development. Meanwhile, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) also held a conference in November 2004 on the revitalization of city centers, and in February 2006, the Council for Social Infrastructure issued a report titled “Urban planning for a new era.” These recognized the need to review policies, and favored suppressing suburban development in terms of both urban planning and building regulation, as well as consolidating urban functions, including residential functions, in city centers.

Thus, in May 2006, bills revising the City Planning Act and the City Core Revitalization Law were passed. Land-use principles that had attracted facilities for large numbers of customers were changed; recognition was given to basing location decisions on urban-planning procedures that reflected local decision-making. In the amendment to the City Core Revitalization Law, approval for basic plans was to come from a higher level, namely the Prime Minister; a City Core Revitalization Headquarters was established in the Cabinet, and the government took the initiative as a whole. This symbolically indicated that the age had ended in which urban commercial policy, a major pillar of distribution policy, was developed in isolation from plans for ideal urban areas.

## 2.5 *The End of the Textile Policy*

### 2.5.1 New Developments in the Textile Industry Toward a “Lifestyle Culture” Model

A review of the role of the Law on Extraordinary Measures for the Structural Improvement of the Textile Industries (“Textile Law”) was undertaken by the Textile Industries Council and the Industrial Structure Council before the Law’s third expiration date, which was set for 1989. The report entitled “Ideal Policies for the Future of the Textile Industry” (November 1988) showed how the situation was understood

(Matsushima 2012, p. 73). First, the report pointed out that imports were increasing rapidly amidst a slump in exports, due to (1) “the upgrading of demand, diversification, short cycles, and spread of textile uses to all aspects of life,” (2) the yen’s appreciation and the advance of Asia’s newly industrialized economies (NIEs), and (3) the continued advances in technological innovation and the shift to information systems. The report argued that the direction the textile industry needed to take was “to build a new demand-oriented response system and to shift toward a “lifestyle-culture” industrial model.” To this end, three problems needed to be overcome: (1) progress needed to be made in structural improvements to build a new demand-oriented supply system; (2) the industry needed to upgrade its product planning, information gathering, and dissemination capacity in order to respond to the trend toward fashion that was evident in more sophisticated demand and in diversification; (3) the industry needed to boldly make the most of the fruits of the rapid developments in technological innovation and the importance of information systems. A demand-oriented supply system is a rapid-response system that highlights actual demand and shortens the lead-time in delivering supplies. It is designed to enable the supply of products to correspond to actual demand at low cost in a timely and flexible manner.

This report represented a change in that it did not use the term “structural improvement,” but instead called for “active promotion of structural adjustment.” It was expected to promote both structural improvement and a smooth “industrial adjustment” at the same time. Structural improvement itself took on a new meaning. That is, it pointed to the “importance of forming groups, through links among multiple firms, that could complement each other with the various functions (linkage production units (LPUs)) needed for a system of supply-chain management in order to respond flexibly and aggressively to a market characterized by diversification and large-variety, small-lot, short-cycle production (Matsushima 2012, p. 78).

Previously, the stress had been on enhancing the distribution of information in industries whose manufacturing processes were divided from each other, but this concept envisioned cases in which companies that had already created vertical linkages among different industries would now go further and play mutually complementary roles. The “Textile Resource Center” was conceived as a means to support infrastructure improvements for building systems of demand-oriented supply. It was expected to gather information on textile materials, designs, and related areas and to enhance the function of transmitting information to textile production regions. This constituted a new understanding of the need for policy responses to the problems facing the textile industry. The law was revised in March 1989 and came into effect in April. The Textile Law was extended for a further five years.

The 1989 amendment featured the establishment of a Textile Resource Center to help build a system for demand-oriented supply. Measures promoted by the Textile Industry Rationalization Agency included the building of a database in the association and the provision of information to a network of textile resource centers based in each of the regions. This method, called “SR-NET Tokyo,” was completed in March 1990. Even so, the costs of collecting information on ever-changing fashion were high, and the networks were not able to adequately meet the demands of industry.

The SR-NET Tokyo accordingly lost its role when in 1997 the “Textile Fashion Information Avenue” took its place. LPUs were designed to be reform enterprises based on group linkages and Minister approval, but Commercial Associations used the framework as well, and carried out plans for a smooth structural reform. From 1989 until 1994, there were 47 structural reform enterprises based on LPUs, and 9 Commercial Association plans. There was also one plan for joint facilities, adding up to a total of 57 projects underway with Ministry approval. The total cost of the projects was 47.8 billion yen. Moreover, under this fourth Textile Law, the facilities registration system was abolished, and as of December 1991, the certificates in use were slated for abolition by October 1995.

### 2.5.2 Policies for Expanding the Textile Industry Market

In advance of the expiration date of the fourth Textile Law, the General Affairs Committee of the Textile Industry Council and the Textile Subcommittee of the Industrial Structure Council compiled a report titled “Ideal policies for the future of the textile industry” in December 1993 (Matsushima 2012, p. 95). While ongoing reductions in the production were observable in response to increasing imports, the industry still employed about 2.8 million people, was the core industry in some regions, and enjoyed a surplus in trade. The report took note of this.

Specifically, the report pointed out that (1) among “its many problematic elements” were the difficulty of acquiring a highly skilled labor force, and as a sector reliant on manual labor, land, and energy, the textile industry in Japan was not cost-competitive compared with those of other countries. However, (2) it was “blessed in demand terms,” the Japanese market’s being not only large but also highly sophisticated in its demand for quality and design. Finally, (3) industries that were closely related to textiles, namely the textile machineries and the electronics industries, were world class. However, (4) it faced the problems of “an industrial structure that encouraged price-based competition.” Accordingly, in order to discover a new direction for creative development while making the most of conditions 2 and 3, the Japanese textile industry needed to aggressively build markets “by undergoing structural reform to shift the paradigm from price competition to product differentiation.” This would also enable the expansion of international markets, in the view of the councils. The report proposed three strategies to this end. The first was “structural reform for market-driven rather than producer-driven manufacturing. Second was an industrial structure that would nurture creativity, and third was strategy on a global scale. The first of these was comprised of concrete measures to develop, produce, and sell the products the market was seeking. Realization of these strategies would require complementary measures by the government, and while continuing to mention the need for structural improvement in areas including distribution, the report also recommended extension of the Textile Law. The revised law was thus passed in March 1994 and came into effect in April. The name of the law was changed on this occasion to the Law on Extraordinary Measures for the Structural Improvement of the Textile Industries (“Textile Industry Law”).

The Textile Industry Law, again extended for five years and almost tantamount to a fifth Textile Law, carried on the basic framework of the fourth Textile Law, and structural reform projects were carried out by linked groups and groups like Commercial Associations. However, the measures that were focused on production sectors, such as the establishment of demand-oriented supply chains, also took into account the reflections on the system that were added in the process of reviewing the law. Market-driven policies took greater priority, along with the need for structural improvement, including in the distribution sector. The points that were revised through the Textile Industry Law included: (1) the addition of design development to new product development, (2) the addition of facilities or equipment leasing to facilities modernization, and (3) the addition of projects for the rationalization of marketing or inventory control. These revisions were intended to respond to the needs of enterprise groups. Furthermore, assistance measures had previously been limited to finance and debt guarantees, but to these were now added subsidies for developing information networks and new aid systems including subsidies for the promotion of local industry. With the expansion of structural improvement projects and subsidy measures, the number of structural improvement projects came to 96 under the Textile Industry Law, while the number of projects to facilitate structural improvement came to 24, for a total of 120 projects. Total costs, meanwhile, including private procurement, were reduced to 15.1 billion yen.

### **2.5.3 A Vision for the Textile Industry of the Twenty-First Century**

The administration of textile policy began to change little by little as the date of the Law's expiry approached. That was because the Hashimoto Cabinet, established in January 1996, sought a move from industry-specific administration to cross-industry policy frameworks, which meant that the report issued by the general meeting of the committees of the Textile Industry Council and the ISC's Textile Committee differed from those that had previously sought extensions of the law (Matsushima 2012, p. 113).

The report understood the changes in the competitive environment to mean the advent of a new age defined in three ways: a market-led era, an era of competition on a global scale, and an era of new frontiers. "Market-led" meant that the initiative in industrial activities would shift from the supply side to the demand side, and that the development of industries could be secured only through completely rational and innovative activity in the market. According to the report, the existing textile industry was not as yet responding as needed to the advent of this new age, and four problems in this area were only becoming more serious. First was the failure to respond to the market-led era: due to the "lack of clarity in risk-taking, a divided, multi-step structure, and the synergism of both of these," the high-cost supply structure was being preserved as was. The industry was moving appropriately in the "market-in" direction, but "rapid response" remained an issue. Second, the response to large-scale global competition was inadequate, and the need for development on an international level was becoming manifest. While Japan was a key center for high-cost planning

and development, the report found that Asia was already in the process of acquiring an enhanced role as a production and development base through international expansion. Third was the need to take on the challenge of new frontiers, as discussed above, and fourth was the slow pace at which reform was under way in textile-production areas.

The report pointed out the reforms considered necessary to resolve these issues, but its most important feature was its premise that these reforms would to a considerable degree be realized through the actions of individual firms in the market. At the same time, the report also pointed out that “given that the market itself is a system, a certain degree of policy intervention is needed to correct the weaknesses in that system or to upgrade that system,” and that policy was needed in a complementary role. It was therefore judged that textile-industry policy should not be carried out in the form of individual measures but rather as an overall policy approach.

The impact of the existing Textile Industry Law over the four-year period from FY 1994 was that roughly 1% (1,000 enterprises) out of all textile businesses. Judgments such as the above were based on the fact that the ripple effects were limited in reforming the industrial structure of the industry as a whole, and that “the current issues of the textile industry are widespread, reform methods correspondingly diverse, and the a priori preparation of fixed packages of particular long-term reform measures would have the effect of limiting the potential for policy support for the textile industry.” The decision was therefore made not to extend the framework of the existing law but rather to abolish it.

In response, the government decided in February 1999 on the Bill of the Law Concerning the Abolition of the SME Corporation and submitted it to the Diet. The Law, which came into effect in July, was aimed at strengthening SME policy so as to comprehensively and efficiently promote measures for small and medium-sized enterprises, and aimed to establish a comprehensive SME corporation team including the Small Business Credit Insurance Corporation, the Small Business Corporation, and the Textile Industry Structural Improvement Business Association. The entity promoting structural improvement was restructured into this, and textile industry policy would henceforth be developed within the framework of SME policy and cross-industry industrial policy.

## ***2.6 Revision of the Small and Medium-Sized Enterprise Basic Law***

The premise of the Small and Medium-Sized Enterprise Basic Law (“the Basic Law”) enacted in 1963 was that the disparities among small and medium-sized enterprises and the changes brought about by trade liberalization were affecting small businesses and that SMEs needed to plan for growth and development through their own autonomous efforts. At the same time, the directions for policy were deemed to be “to rectify the disadvantage of economic and social constraints” (improve the business environment) and to “promote the voluntary efforts of the SMEs” (support for

improvement of management). Through these approaches, both “improved productivity” (raising physical productivity) and “improved trading conditions” (upgrading of actual value) could be achieved. Improvements in productivity were expected through such measures as the modernization of equipment and expansion of scale, whereby transaction terms and subcontracting could be improved and excessive competition prevented.

However, the economic and social environment surrounding small and medium-sized enterprises had changed greatly since the establishment of the Basic Law (Nakata 2013, p. 72, p. 1207). The May 1990 interim report “SME policy in the 1990s” issued by the Small Business Policy Council Planning Subcommittee addressed (1) “the role expected of small and medium-sized enterprises,” (2) “small and medium-sized enterprises in the 1990s,” and (3) “directions for SME policy.” The first of these stressed “small business as the source of creativity” and the second stressed the need for SMEs to reflect and serve potential demand. These ideas were new in that they suggested that small and medium-sized enterprises might themselves foster the creation of new markets. The third called for policy to support enterprises’ self-help efforts and for a review of the question of whether competition-restricting cartels were not resulting in protection for vulnerable sectors. The Basic Measures Review Subcommittee, established at the SME Policy Council in October 1992, also presented the “Issues and future directions for SME Policy” in June 1993. It sought a policy system that would (1) strengthen the management base, (2) support structural reform, and (3) develop measures for small-scale businesses, and these in themselves were not a clear expression of a change in policy, but presented what would be part of the discussion that later led to the revision of the Basic Law. Apart from this, a report on industrial structure reform (“21st-century industrial policy report”), conducted by the Basic Issues Subcommittee of the Industrial Structure Council’s General Committee in June 1994, made two important points regarding SME policy. First, regarding the debate over the hollowing out of industry, the report stated that changes in the domestic and foreign economic environment and in the comparative advantages of the industry were leading to overseas relocation and import substitution. These in and of themselves should not necessarily be regarded as problems, according to the report, because they meant that the industrial structure was becoming optimized in a global sense. Second, it strongly urged the promotion of deregulation. In other words, new movements were being made to reform the protective policies that had previously prevailed regarding SMEs.

Based on these arguments, the SME Policy Study Group was established as a private advisory group to the Director-General of the Small and Medium-sized Enterprise Agency in July 1998, issuing a mid-term report in November 1999 and a final report in May that called for a review of policy ideals and systems. It cited the following as problems in the former Basic Law system. The first problem was the variance between the reality and the policy concept, which had been based on the idea of correcting the disparities in the so-called dual structure. Second, the policy approach that had been effective in the past had been maintained, hindering the flexible or effective allocation of funds. Third, new policies had been added to existing policies, leading to complex and highly segmented measures that were hard for users to

understand. The report also stated that it was no longer inappropriate to treat SMEs uniformly as weak players. Rather, they should be expected to play an active role in creating a dynamic Japanese economy by demonstrating mobility, flexibility, and creativity. This, too, called for a shift in perception. The active roles SMEs could play were envisioned as incubators for market competition, innovators, creators of attractive job opportunities, and developers of regional economies. The first of these referred to stimulation of market competition through the business activities of many small and medium-sized enterprises, which would promote “economic metabolism,” or an organic self-sustaining process. Specific policy goals to give these roles real significance were the improvement in the conditions of competition, assistance for SMEs’ self-help efforts toward founding businesses and introducing innovations to management, and finally, maintenance of the safety net.

Then-SME Agency Minister Katsuhiko Tokita said that, “MITI was pursuing rationality in policy. The SME Agency, too, was intent on clarifying principles and policies that would shift our footing both officially and substantively from a so-called social policy-driven SME policy toward a forward-looking industrial policy.”

In June 1996, the SME Policy-Making Council, with enquiry from Prime Minister Obuchi, established a cross-sectorial subcommittee and proceeded with a review. Its interim report came out in August, and its final report, “A new SME Policy for the 21st century” (the 1999 Report) in September. Fundamentally, this aligned with the final report of the SME Policy Study Group cited above and strongly reflected the concepts of a market orientation and of deregulation. The content, which addressed the changes of the 1990s with policies oriented to the twenty-first century, included: (1) changes in the macro-economic environment, (2) changes in values and lifestyles, (3) the advance of globalization and changes in industrial structure, (4) changes in relationships among enterprises, and (5) changes in industrial integration and in distribution structures. The first of these pointed out that the income levels of those working in SMEs had risen alongside the overall rise in income levels, and that gaps in income were no longer evident, but that at the same time, with the maturation of the economy, growth itself had fallen, and that increases in added value, efficient use of capital, and upgrades in the quality of labor had all become important for the new age. The fourth focused on the growing fluidity of the division of labor among subcontractors and the trend toward decreasing numbers of subcontractors. The fifth presented the constraints on the autonomous development of regional localities, and concerns about the increasing weakness of industrial integration, which was at the foundation of *monozukuri*, or Japan’s distinct manufacturing craftsmanship. It was expected that SMEs would serve as incubators for market competition, as innovators, as creators of appealing jobs, and as developers of local economies and society. The policy concepts for putting this into concrete form were to be based on “respecting and activating the market mechanism,” meaning first, to facilitate the conditions for competition in which SMEs would play an active part; second, to reinforce progress by SMEs toward innovation and creativity; and third, to establish a safety net. The second and third points were especially recognized as expressing something new.

The New Basic Law was based on the above circumstances. In broad outline, it carried on the new philosophy laid out by the council’s report: (1) the shift in

principle, (2) the change in policy systems, (3) the diversification of policy methods, and (4) the expansion of the range included in SMEs. The first shifted away from rectifying the gaps among SMEs to expectations that the SMEs would serve as sources of economic development and economic strength. The second called for shifting to the pursuit of advantages of scale, and from compensating for disadvantages to pursuing novelty and originality, as well as for the strengthening of the foundations of management, and maintenance of a safety net. The third represented a shift from loans and organization-building to greater diversity in policy approaches, including methods that stressed direct financing and supplementing soft resources. The fourth included a review of definitions to bring them into line with economic realities and measures for raising capital standards.

Thus the policy principles regarding SMEs advanced in keeping with the goals of economic structural reform.

### **3 Pursuing Rules-Based Multilateral Coordination**

#### ***3.1 The Conclusion of the Uruguay Round and Launching of the WTO***

##### **3.1.1 Uruguay Round Negotiations**

The Uruguay Round agreement was reached in December 1993 after seven years of talks. The outcomes of the round were the following (Abe 2013, p. 403). First, whereas previous rounds had centered on tariffs negotiations, the Uruguay Round formulated rules in new areas such as intellectual property rights and trade in services. It also broadened the scope of discussion to include the textile and agricultural sectors, which were not yet sufficiently covered by GATT rules. Second, resisting the tides of protectionism, bilateralism, and regionalism that emerged in the latter 1980s, the Uruguay Round supported the idea of free trade as the fundamental principle of international commerce. Third, the scope of dispute settlement was expanded and expedited under the WTO, dramatically improving the functioning of dispute resolution. Fourth, due to the role played by the WTO, the following changes in the resolution of international disputes were observed: whereas GATT's procedure for dispute resolution was fundamentally a political one, the WTO's approach placed a relatively high priority on resolving disputes by interpreting the law, meaning a shift from political to judicial decisions.

The specific issues discussed during this period (Abe 2013, p. 425) included the Multi-Fiber Agreement (MFA). As noted in the previous chapter, the meeting of senior officials in April 1989 stated that “[Ministers] agree that measures on the process of integration into GATT cover the abolition of regulations based on the multilateral textile agreement (MFA). . . .” In other words, it established a path to the elimination of the MFA. Additionally, the WTO Agreement on Textiles and Clothing

recognized “transitional safeguards” (TSGs). These differed from the safeguards (SGs) of the 10-year period when textiles were integrated into GATT. They were intended to address market confusion in domestic textile industries that resulted from surges in imports during a transitional period. In 1993–1994, MITI rapidly developed procedural rules on TSG-triggering measures. This was because, whereas the SGs had never been triggered before, the textile industry was now beginning to suffer from import pressures to a degree that MITI policies had to be changed.

In March 1995 the industry requested that TSG measures be implemented and MITI judged that there was sufficient evidence to do so, but as of the November decision, imports of the target items were stabilizing and even appeared to be contracting. The TSG measures were therefore put off. Japan in fact never launched the TSGs, and when the Textile Agreement expired at the end of 2004, textile trade was integrated into GATT.

From the mid-term review to the final stage, anti-dumping (AD) also emerged as an issue that could affect the success of the entire round. Interest in anti-dumping began to build internationally after the summer of 1989. This was because of mounting conflict over how to make the international rules of the 1979 Tokyo Round’s Anti-Dumping Code (1979) function in light of the national laws of the member countries. At the end of the negotiations in December 1991, the GATT director-general presented the Draft Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiation (“Dunkel Draft”), which emphasized the director-general’s arbitration solutions to individual points of contention. Although the draft was accepted because of the priority member countries placed on the Uruguay Round, the contents of the Draft AD Agreement became a political controversy within the US from 1992–1993, and a number of amendments were made before agreement was ultimately reached.

The rules governing the various entity requirements and procedural requirements for invoking AD measures were also given specificity and clarity. Because Japan was, among developed countries, exceptionally subject to anti-dumping complaints, it was particularly concerned to see the international rules strengthened with regard to the operation of AD laws, and its contributions to the realization of the new agreement were significant.

### **3.1.2 Developments and Setbacks in the WTO System**

The Uruguay Round presented new issues. Where previously trade issues had dominated, the Uruguay Round raised matters that were entangled with domestic systems, and with the dramatic increase in the number of parties participating, the multilateral negotiations that were to follow on the inauguration of the WTO were expected to be challenging (Abe 2013, p. 535).

The main roles of the WTO, launched in January 1995, were: (1) to forward the implementation of the Uruguay Round consensus, (2) to provide a forum for multilateral trade negotiations, (3) to manage dispute settlement procedures, (4) to administer the trade policy review mechanism, and (5) to coordinate global economic policy

planning with the International Monetary Fund (IMF) and the World Bank. The first was the biggest task for the WTO immediately after its inauguration. The WTO was involved with the implementation of the obligations incurred under the WTO Agreement, including member state compliance with reporting obligations, implementation of concrete promises (the revision of domestic laws and tariff reduction), and matters on which member states had agreed to ongoing negotiations. Efforts were therefore made to introduce highly transparent institutional mechanisms so as to enable monitoring, and this was achieved.

In accordance with the regulations set by the Marrakesh Agreement establishing the World Trade Organization, an inaugural ministerial conference in Singapore was scheduled, and from early 1996, WTO member states began coordination on what that meeting would address. Japan had four items on its agenda: (1) inspection of the implementation status of the Uruguay Round agreement, (2) further liberalization, (3) the introduction of new areas for discussion, and (4) deliberations on admitting China, Taiwan, Russia, and other countries to the WTO. Japan's position on expanding WTO target areas was in common with that of other developed countries, producing a heated battle with the developing countries that opposed expansion. The developing countries firmly maintained the stance that the Singapore Ministerial Meeting was an opportunity to discuss implementation of the Uruguay Round Agreement. Through the negotiations on the content of the ministerial conference, agreement was finally reached on launching discussions of investment and competition, and it was confirmed that the WTO would not begin work on labor standards. This was in line with Japan's expectations and represented a significant achievement. The greatest achievement of the Singapore Ministerial Conference was the WTO Information Technology Agreement (ITA), which resulted in the December 1996 Ministerial Declaration on Trade in Information Technology Products. In principle, tariffs would be reduced in four stages, affecting 200 products according to tariff classification such as semiconductors, computers, computer software, telecommunications equipment, semiconductor manufacturing equipment, and others. The reductions would begin in July 1997 and the tariffs would be completely abolished by January 2000. The ITA negotiations differed slightly from prior tariff negotiations in that they did not have a mercantilist character. Rather, there was general agreement on the idea that tariff elimination would be desirable for all member states, and negotiations were concluded quickly.

The Seattle Ministerial Conference of November 1999 aimed to launch a new round beginning in the year 2000 and to agree on the scope and method for those negotiations, but this was not achieved. This was because "problems with the decision-making mechanism" arose in the preparatory process, and because compromise was not reached either among the leading developed countries or between the developed and developing countries on "conflicts over specific points at issue." The "problems with the decision-making mechanism" arose because the increasing presence of developing countries in the preparatory process meant more time spent on coordinating among the member states. There was a backlash against the traditional mode of determining the agenda through small-group "Green Room" discussions

led by the advanced and newly emerging nations. In addition was the fact that anti-liberalization and anti-globalization protests by NGOs, labor unions, and others grew more extensive than anticipated. This, too, contributed to the failure of the negotiations.

The Doha Ministerial Conference that followed in November 2001 succeeded, after various difficulties, in launching a new round. It narrowed its objectives and gave greater consideration to transparency and efficiency in the format of the meetings. The Declaration released in November represented agreement on achieving a new round on a wide range of areas, including (1) improvements to market access (agriculture services, tariff negotiations on industrial goods, and so on), (2) improvements to existing WTO rules (strengthening discipline of anti-dumping and other measures.), (3) responses to various twenty-first-century issues (rules on investment and competition, trade and the environment, e-commerce, and other measures.). The declaration said that this broad agenda would be subject to the consensus rule and that the Round would be completed by January 2005.

The new Round was named the “Doha Development Agenda” to show the importance ascribed to developing countries. The negotiation aimed at outcomes for reducing poverty and achieving economic growth. By eliminating such items as the WTO Agreement’s “implementation issues,” protection of intellectual property rights with the TRIPS Agreement (Agreement on Trade-Related Aspects of Intellectual Property Rights), and the advanced nations’ high tariffs and export subsidies on agricultural goods, the Doha Round was intended to do away with impediments to development. Investment and the environment were therefore added to the areas discussed in earlier rounds, including agriculture, non-agricultural products, and anti-dumping, resulting in extensive and comprehensive negotiations to respond to new needs such as the needs of developing countries. However, negotiations stalled at the 5th Ministerial Conference in Cancún, Mexico, in September 2003, and extension of the original January 2005 deadline became unavoidable. The WTO General Council in August 2004 sharply narrowed the negotiating agenda, and the sixth Ministerial Conference in Hong Kong that followed in December 2005 adopted a declaration that took full account of developing countries. Nevertheless, the WTO was forced to extend the negotiation deadline once again. The lack of momentum among the negotiating countries, the standoffs on individual areas of negotiation, and the difficulties in coming to decisions have all been attributed to these repeated deadline extensions, and the cumulative effect was to cast doubt on the workings of a world trade system centered on the WTO.

### **3.1.3 Advancing Rule-Based Criteria in Trade Policy**

Throughout the Uruguay Round negotiations, an International Economic Affairs Division, Tariff Division, and Temporary General Trade Negotiation Office dubbed the “GATT Office” were placed in the International Economic Affairs Department of the MITI’s International Trade Policy Bureau (Abe 2013, p. 529). In 1990, the Office for Trade Policy Review was established in the International Economic Affairs Division. It was tasked with responding to such matters as the US National Trade

Estimate Report on Foreign Trade Barriers. It aimed to point out foreign practices and customs that from Japan's point of view acted as barriers to trade, not by establishing arbitrary standards as America had done, but by citing international rules under GATT and other agreements. The Report on Compliance by Major Trading Partners with Trade Agreements ("Unfair Trade Report") published in June 1992 was epochal in its clear rejection of the US's results-oriented criteria in favor of "rules-based criteria."

In addition, a Fair Trade Center was established as an affiliate of the Japan Foreign Trade Council, Inc.'s Trade Research Center just prior to the start of the Uruguay Round. The Center built close cooperative relationships with the Tariff Division of the International Economic Affairs Department and provided a place for information sharing and the exchange of opinions with domestic export industries. It also endeavored to build cooperative relationships with academia.

The shift to a rules-based trade policy by MITI and others and the cooperative system developed with domestic industry and academia were organically linked to each other and offered the systemic underpinnings for active participation in WTO negotiations and utilization of WTO Dispute Settlement Procedures.

Regarding specific issues, the panels that Japan requested of GATT on the EEC's AD parts and components regulations were held twice, in July and September 1989. The Panel Report was distributed to the parties in March 1990, mostly approving Japan's claims. The EEC's new rules were intended to prevent the avoidance of AD taxation on finished goods by imposing a retroactive tax on parts that were imported and assembled using the so-called knockdown method. Japan argued that the EEC's parts taxation was a domestic tax because it was not imposed at the point of importation, and that to apply it only to imported products constituted a violation of GATT Article 3, paragraph 2, Sect. 1. Additionally, the exemption from the parts tax based on local procurement rates would give priority to the use of EEC products and was therefore contrary to GATT Article 3.4.

Additionally, in May 1991, the EC Board of Directors approved AD taxation on audiocassette tapes, and Japan consulted with the ADP Committee (Committee on Anti-Dumping Practices) but the consultations did not result in an agreement. Japan therefore requested the establishment of a panel in October 1992. During this period, MITI made it clear that it would steer its trade policy toward multilateral, rule-based criteria, away from bilateral trade management through so-called gray measures, and it showed no hesitation in doing so in this audiocassette case.

### **3.1.4 Conditions for Utilizing WTO Dispute Settlement Procedures**

The first time Japan appealed to the WTO's dispute settlement procedures was with regard to US automobile customs duties (Abe 2013, p. 589). This was part of a long-standing dispute between the two nations regarding autos and auto parts. The New Economic Partnership Framework talks of July 1993 had not come to terms on the interpretation of numerical targets, and following the repeated breakdown of negotiations, the US announced a proposed list of sanctions in May 1995. Japan responded

immediately by requesting WTO consultations in May, based on GATT Articles 4 and 22-1 (Understanding on the rules and procedures governing the settlement of disputes). In June, bilateral talks between Japan and the US began in Geneva based on WTO dispute settlement procedures. Here, too, there was no agreement in the two positions, but MITI Minister Hashimoto asked US trade representative Mickey Kantor to push back the US deadline for sanctions, and with the presentation of an “overview” of a voluntary plan by five Japanese automakers, the Japan–US autos and auto parts negotiations reached agreement.

Japan thus rejected “result-oriented standards” and pursued “rules-oriented standards” as had already been declared in the “unfair trade report.” This showed both the domestic world and Japan’s trade partners that Japan would adhere to this stance even in specific cases, which had great significance for Japan’s trade policy. It also made a strong impact by showing that the negotiations were to Japan’s advantage because the dispute settlement procedures that had been strengthened by the establishment of the WTO proved effective against the US position of pursuing negotiations based on Sect. 301 trade sanctions. Subsequent negotiations confirmed the value of Japan’s stance. For example, in May 1995, America’s Eastman Kodak Company filed suit under Sect. 301 over a film case, but Japan succeeded through WTO proceedings in having these claims dismissed. These results were significant for Japan’s trade policy in that they demonstrated that legal procedures could offer protection. From 1997 forward, the number of US demands for unilateral market opening shrank drastically, and economic friction between the two countries diminished.

There were many other examples of anti-dumping incidents, but the resolutions that were based on WTO dispute settlement procedures represented a shift from reliance on conventional bilateral diplomacy to legal approaches based on multilateral procedures. The cases that went to the WTO were by and large AD-related issues with the steel and auto industries as the principal targets and the US as the main country in dispute. This was because Japan used the WTO’s procedures to curb such US protectionist tactics as AD measures. It also reflected the fact that Japan was utilizing the WTO’s procedures to monitor industrial policy measures related to automobiles.

### **3.1.5 Activating the Import Relief Law—Japan’s Transition from Target to Petitioner**

GATT’s trade liberalization, centered on tariff reduction, gave rise to domestic protectionist pressures in developed countries, which manifested themselves in the quest for trade barriers that could replace the tariffs (Abe 2013, p. 657). The active use of trade remedy actions (principally AD measures) and voluntary export restraints (VERs) were found especially useful. It was easier to use AD measures to develop technical methods for calculating higher duty rates than to invoke the Countervailing Duties (CVD) Law. This made protectionist action easier, and whereas safeguard measures had to comply with the WTO’s non-discrimination rules, AD measures could be used to target imports only from specified countries.

From 1980 to 1989, the number of AD investigations worldwide totaled 1,648; Japanese products were the targets of the highest number of these, at 161. Between 1990 and 1993, however, Japan was the target of 38 cases out of a total of 683, and of 61 out of 1,253 cases from 1995 to 1999. In other words, Japan's position vis-à-vis AD petitions changed around 1990.

Meanwhile, Japan had held back on initiating import relief measures until the late 1990s. This reflected Japan's position as an exporting nation, as well as the facts that agricultural and textile products were excluded from GATT's trade liberalization framework and that Japan preferred resolutions based on voluntary export restraints vis-à-vis its partner countries. Early in the twenty-first century, however, reforms were made with a view to increasing the initiation of petitions. The shift came with the 2001 petition for safeguards on three agricultural products (green onions, shiitake mushrooms, and tatami mats). That Japan sought to protect agriculture by pursuing safeguard investigations and interim measures was new in and of itself, but it also became the catalyst for the reform of Japan's domestic systems. This series of amendments demonstrated the penetration of a legalistic attitude on these issues, with an emphasis not only on the transparency and predictability of the investigative procedures but also on their efficiency and timeliness.

## **3.2 *Regionalism and Japan***

### **3.2.1 The Alteration of APEC**

In principle, the GATT framework included most-favored-nation (MFN) treatment, but some exceptions were allowed, including two types of Regional Trade Agreement (RTA): Free Trade Agreements (FTAs) and Customs Unions. The number of FTAs gradually increased, and began to threaten the relevance of the WTO. This regionalism, emergent from the late 1950s to the 1970s, began expanding in the 1990s (Abe 2013, p. 712).

For example, the United States' basic trade policy from immediately after World War II to the 1980s was to construct a non-discriminatory multilateral trading system. The US only permitted the 1950s establishment of the EEC and EFTA (European Free Trade Agreement) in Europe due to the Cold War priority of promoting the economic development of Western countries. However, the US's negative attitude toward regionalism began weakening in the 1980s. The United States signed an FTA with Israel in 1985 and with Canada in 1989, signaling a shift from multilateral and gradual liberalization utilizing GATT to regional liberalization using FTAs. Thus, in the mid-1980s, the United States pursued three courses: multilateral and gradual liberalization through GATT, regional liberalization using FTAs, and the unilateralist improvement of access to specific markets in specific countries. The United States also sought to conclude an FTA with Asian countries including Japan. It was unable to do so, however, because Japan was cautious about the impact of bilateral agreements on GATT and on the position of Asian countries. Nevertheless, the US continued to

maintain a regionalist course and concluded NAFTA (North American Free Trade Agreement) with Mexico and Canada in the first half of the 1990s.

East Asia did not do much to follow the regionalist course of Europe and the US until the late 1990s, instead defending the non-discriminatory and multilateral GATT trade regime. Asia-Pacific Economic Cooperation (APEC) was an example of this stance. APEC, the concrete form of which was based on deliberations in the Japanese and Australian governments, declared a principle of “open regional cooperation” at its first Ministerial Conference in November 1989 and announced its intent of curbing the move to bloc economies. APEC was originally formed on the understanding that European and American regionalism were functioning as *de facto* forms of protectionism and that steps needed to be taken to avoid Asian markets’ shrinking as a result. In other words, APEC was not conceived as either an FTA or a customs union.

However, APEC members did not necessarily share this philosophy. APEC’s role therefore began changing around 1993 and 1994. The United States showed a strong interest in expanding the East Asian market and liberalizing trade, but its suggested approach as APEC Chair in 1993 was that of an FTA rather than adherence to the GATT framework. Thereafter, although the Bogor Declaration issued at the November 1994 Indonesia summit still confirmed an anti-regionalist stance, APEC lost its role as a venue for negotiating collective liberalization. Instead, at the Osaka Ministerial and Leaders Meetings of 1995, APEC adopted the concerted unilateral action (CUA) approach. CUA was the product of a compromise between the United States, Canada, Australia, and New Zealand, which sought binding liberalization, and the countries of Asia, which preferred greater national autonomy. Japan, though arguably an advocate of further liberalization, struggled because the Agriculture Ministry did not want to liberalize beyond the levels agreed to in the Uruguay Round. Nonetheless, the 1996 meeting in the Philippines issued a positive message with regard to the ITA (Information Technology Agreement) that spurred member countries to work on advancing the Early Voluntary Sectoral Liberalization (EVSL) originally raised at the Osaka meeting of 1995. Still, negotiations remained extremely difficult, and by 1998 any possibility of achieving agreement had vanished. On the contrary, doubts were raised about promoting liberalization based on an APEC framework. Nevertheless, the APEC meetings continued, and in the early twenty-first century, a wide range of issues such as countermeasures against terrorism, global warming, and energy were added to the scope of its deliberations.

Meanwhile, the EVSL’s failure in 1998 led East Asian countries to seek out an FTA approach. Japan’s stance on FTAs was negative on the whole because it placed its confidence in the GATT/WTO regime and on rules-based negotiations. However, with the conclusion of Japan–US semiconductor talks in 1996 and the easing of the trade friction between the two nations, there was less need to adhere to a rules-oriented trade policy. Japan accordingly held FTA consultations in 1998. Despite Japan’s emphasis on GATT, MITI concluded that it should actively pursue not only multi- but bilateral relationships as well, because the most active developments of the period were occurring in the FTAs and customs unions advanced by the US and the EU. Japan’s FTA with Singapore marked the first concrete result of the new policy.

Based on consultations held in March 1999, MITI actively pursued the agreement, which was concluded in January 2002. It then reached an agreement in principle with Mexico in March 2004 and established a path to advancing an FTA there.

### **3.2.2 The Asian Industries Development Plan Based on Economic Cooperation**

The Asian Industries Development Plan, adopted as an economic cooperation measure, aimed to transmit to ASEAN (Association of Southeast Asian Nations) countries the Japanese development strategies that had given rise to industrial policy. It was distinctive in that it existed outside the constraints of the ODA (Overseas Development Assistance) framework. MITI promoted the so-called New Aid Plan of 1985–1991, which emphasized technical cooperation, and from 1992–1996, advanced policies for upgrading ASEAN industries.

The latter differed from the earlier New Aid Plan in several ways. First, it developed a method called policy cooperation that sought continuous dialogue between the governments; second, it did not rest on bilateral assistance but on turning policy into concrete forms through links with the ASEAN Economic Ministers Meeting (AEM), an ASEAN multilateral organ; and third, while the “New AID Plan” in reality covered the so-called ASEAN 4—Thailand, Malaysia, Indonesia, and the Philippines—the later version aimed to promote ASEAN market integration.

According to MITI’s 1993 report, “ASEAN industrial development vision—industry policy recommendations,” the need to upgrade ASEAN industry arose because the ASEAN 4 were losing their competitiveness to China and Vietnam in labor-intensive sectors. Even though the policy covered countries other than the ASEAN 4, it aimed to increase the ratio of capital-intensive fields that would realize high added value in these four countries as a whole. Specifically this meant (1) fostering supporting industries, meaning the parts industries required for assembly-type manufacturing; (2) implementing a development-oriented industrial policy; and (3) improving the systems for intellectual property rights.

Policies targeting areas outside these four countries were advanced through the ASEAN Economic Ministers, with an annual AEM–MITI meeting established in November 1991. Although the meetings involved multiple negotiating partners, the most important parts of the AEM–MITI mechanism were (1) the bilateral policy talks at the vice-ministerial level, and (2) the Working Group on Economic Cooperation in Cambodia, Laos, and Myanmar (CLM–WG). The second of these reflected ASEAN ideas of building a production network of assembly-related manufacturing industries in other countries centered on the ASEAN 4, which were making the shift to so-called supporting industries. This made it difficult to coordinate among the various interests regarding which production sectors should be introduced to which country. The CLM–WG, which was established as an AEM–MITI organ in 1994, held many talks, and in 1998 evolved into the AEM–MITI Economic and Industrial Cooperation Committee (AMEICC) or Japan–ASEAN Economic and Industrial Cooperation Committee). Ultimately, a division of labor was developed between the region and

the Japanese companies, which boasted an overwhelming share of assembly-related manufacturing in ASEAN.

Following the 1997 Asian monetary crisis, the system of untied yen loans was revised. Japanese-company exports were promoted through untied yen loans based on international bidding, and a new system of tied loans was created. The first consisted of two policies: (1) dividing the consulting portions of the infrastructure construction project, such as decisions on design and use, from the provision of the yen loan, which would have no conditions attached to it; and (2) treating the yen loans as untied but using diplomatic efforts to urge that Japanese companies win the bids. However, from 1999 forward, this second approach came under criticism, principally from the US, at the OECD Working Party on Export Credits and Credit Guarantees and other meetings, and in 2004 Japan was forced to agree to arrangements for more transparent information sharing. The tied loans, meanwhile, were based on the Hashimoto Cabinet's promotion of "special interest-rate loans for environmental projects" after 1997. This approach was adopted because environmental issues were assuming importance in developing countries. The loans supported proposals with little commercial application, and to which the OECD Arrangement on Official Supported Export Credits (the "Helsinki Package") would not apply.

### ***3.3 Trade Friction and Multilateral Coordination***

#### **3.3.1 US–Japan Framework for a New Economic Partnership**

With the drastic international changes that followed on the end of the Cold War in 1989 and the collapse of the Soviet Union in 1991, the United States found it harder to sustain the generous stance toward Japan's policies that had prevailed during the years of greater East–West tension. The Clinton administration, while maintaining the traditional route of pursuing free-trade ideals and strongly determined to open markets in other countries, pursued a "results-oriented" trade policy with respect to Japan.

The shift from the "procedural emphasis" of the Reagan and Bush eras reportedly took place at the direction of President Clinton himself at the beginning of March 1993 in preparation for the Japan–US summit meeting the following month. At the talks, Prime Minister Kiichi Miyazawa clearly opposed the new approach as an example of managed trade. Deputy Assistant to the President Bowman W. Cutter reviewed the policy, including it in May's "Japan Paper." In June, it was presented to Japan as a draft for the comprehensive economic consultations that were to become the US–Japan Framework for a New Economic Partnership (Abe 2013, p. 89). The "Japan Paper" enumerated macroeconomic objectives, including the reduction of Japan's current account surplus based on GDP ratios and "sector-specific and structural negotiations." MITI and the Japanese government completely rejected this approach, especially the setting of numerical targets. However, in July, the "Miyazawa Letter" suggested a compromise, which led to the announcement later that month of the Joint

Statement on the Framework for a New Economic Partnership Between Japan and the United States.

The new US–Japan Framework consisted of three pillars. The first concerned macroeconomic issues, the area regarding which the US, in the July agreement, had requested a clarification of concrete goals. The Framework called for Japan to reduce its current account surplus by promoting domestic demand-led economic growth and market opening. Ultimately, this did not become part of the negotiations on specific items. The second pillar was a proposal for sector-by-sector discussions and negotiations, or “sector-specific agreements.” These addressed five areas: “government procurement,” “regulatory reform and competitiveness,” “other major sectors (automobiles and auto parts),” “economic harmonization,” and the implementation of “existing agreements.” The sector-specific talks were the centerpiece of the negotiations. The third pillar was “cooperation on a global scale.” This was aimed at formulating 15 action groups in the five fields of environment, technology, human resources development, population, and AIDS, with action plans for Japan and the United States to respond with a shared understanding of the problems at hand (Fig. 3).

The talks were wide-ranging, but certain basic principles emerged: First, the Clinton administration maintained its “results-oriented approach” and “objective criteria” to the end. Second, the talks required compromise by both countries. In this sense, the Framework followed the direction set by the SII talks, and some of the items reflected Japan’s interests. However, the US consistently saw the Framework talks as intended to seek action from the Japanese. America therefore insisted, with regard to certain US measures that Japan considered problematic, that they were non-negotiable despite the principle of resolving disputes through negotiation. Third, the scope of negotiations was limited to those areas to which government could respond. Like the second attribute above, this reflected Japan’s stance and was often opposed by the US.

### 3.3.2 Difficulties in the Auto Negotiations

At follow-up discussions to the high-level Market-Oriented Sector-Selective (MOSS) talks that started July 24, 1991, the US proposed replacing the MOSS Agreement-based surveys of auto parts with a new survey of sales opportunities for automobiles in the Japanese market. The decision was made to implement this as a type of voluntary purchase expansion plan (Abe 2013, p. 109; Hasegawa 2013, p. 357) because even by the early 1990s, the US automobile industry’s predicament and the trade imbalance between Japan and the United States had not improved. The plan did not satisfy the US, however, but became one of the issues addressed in the later Framework talks. The focus of the Framework talks was the large gap between the two sides on what constituted “government reach” and “objective criteria.” Both governments were supposed to endeavor to agree on “appropriate objective criteria” to evaluate the achievement of the goals, but the US had proposed that the Japanese government adopt numerical targets. The Japanese government, however, only encouraged voluntary action by the automobile industry, and remained opposed to setting concrete

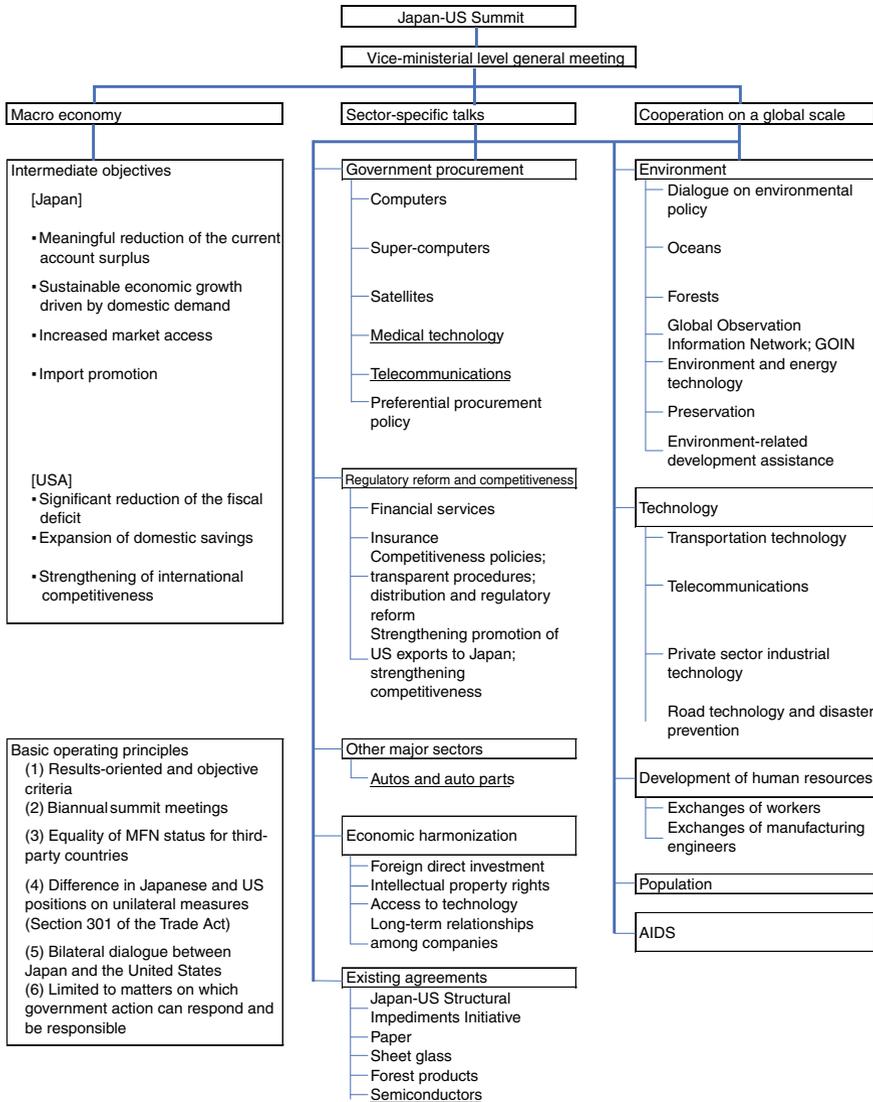


Fig. 3 Composition of the US–Japan Framework for a New Economic Partnership

numerical targets, because a basic principle of the negotiations had been to limit “the talks to matters of government responsibility,” and the Japanese government regarded numerical targets as beyond its reach.

Talks were suspended due to this disagreement, and with the repeated breakdown in negotiations, US Trade Representative Kantor launched investigative procedures aimed at imposing sanctions on auto repair parts under Sect. 301 of the 1974 Trade Act. The Clinton administration decided to impose sanctions against Japan on May 10, 1995, and at the same time announced that it would file a complaint with the WTO

accusing Japan of discriminating against American products in Japan's automobile and auto parts market. Regarding the investigation of the repair parts market, the USTR determined that "a number of Japanese behaviors, policies, and practices regulate or deny American auto parts suppliers access to Japan's repair parts market, and this is irrational and discriminatory and imposes a burden on or restricts US commerce" and that it would "announce a list of retaliatory measures within a few days."

MITI Minister Hashimoto expressed regret regarding the list, and Japan decided to seek resolution through the WTO dispute settlement system. On May 17th, it requested discussions with the United States under GATT Article 22-1. Japan asserted that application of sanctions in the form of a 100% customs duty only on Japanese products violated GATT Article 1 on most-favored-nation treatment and violated Article 2, although Article 2 exempted tariffs exceeding the 2.5% bound rate the US imposed on auto imports. Japan further argued that the US announcement of sanctions could be regarded as a unilateral measure by the US in violation of Article 23 of the WTO Agreement on dispute settlement consent; that Kantor's request that the US Customs Service determine the customs duties on Japanese-made luxury cars violated GATT Article 11, which prohibited bans or restrictions (quantitative restrictions) other than tariffs on imports and exports, and GATT Article 13, which regulated the application of non-discriminatory measures; and so on.

The 34th OECD Ministerial Council held in Paris May 23–24, just after Japan filed suit with the WTO, addressed the Japan–US issue of trade in autos and auto parts and the participating nations adopted a joint statement criticizing the unilateral measures of the United States. The Japanese government hoped that it would receive international support by bringing the talks to the WTO, and that the problem would be resolved without its having to yield to the hardline stance of the United States. Meanwhile, MITI prepared for the initiation of sanctions and considered how it might take countermeasures in response.

The two countries gradually explored possible breakthroughs for the negotiations through the formulation of voluntary plans, however, and ultimately five automotive manufacturers submitted new voluntary plans. The plans did not include any purchasing targets for US-made auto parts or local procurement rates, and MITI never committed to the contents of the plans. The United States showed some dissatisfaction with the absence of clear numerical values for automotive parts, but MITI adhered to its refusal to provide any further information. Ultimately, the US interpreted the plans on its own, enabling settlement of the issue for the time being. MITI succeeded in avoiding triggering sanctions under Sect. 301 of the Trade Act, maintaining the principle of confining negotiations to areas for which the government was responsible.

The auto- and auto-parts negotiations proved difficult because the US remained fixed on setting numerical targets as against Japan's proposed "corporation approach" of promoting inter-industry cooperation. Agreement was reached in June 1995 based on a voluntary plan by Japan's leading auto manufacturers. The plan allowed for a five-year term for such Japan–US measures as expansion of foreign automobiles' access to the Japanese market, expansion of purchases of foreign-made auto parts, and deregulation of inspections and procedures, based on confirmation of (1) compliance

with international trade rules including the WTO Agreement and (2) elimination of numerical targets and the establishment of the principles of free trade and free-market economics. After the agreement, the number of imported cars sold in the Japanese market steadily increased. The US remained dissatisfied, however, because in the economic downturn after 1997, European car sales increased. Concerned about the decline in exports of foreign-made automobile parts to Japan and about the repair parts market, the US requested further deregulation. Although Japan proposed launching new talks in December 1999 before the expiry of the 1995 measures, the United States demanded the measures' expansion and extension, and the two sides failed to reach an accord. The 1995 agreement expired in the year 2000.

### 3.3.3 Numerical Targets and Semiconductor Negotiations

Japan and the US concluded a five-year agreement in June 1991 concerning market-opening measures for semiconductors, which was one of the major issues between the two nations (Abe 2013, p. 122; Hasegawa 2013, p. 146). The two pillars of the agreement remained the same as those in the old Semiconductor Agreement: (1) expansion of access to the Japanese market for foreign semiconductors and (2) prevention of the dumping of Japanese semiconductors in the US market. There were changes in content, however. Specifically, the US industry "hoped" that the market share of foreign semiconductors in Japan would exceed 20% by the end of 1992, and the Japanese government recognized this expectation, but the two governments agreed that this did not constitute a guarantee of market share or a target range of maximums and minimums. The US interpreted this to mean a de facto acknowledgment of undisclosed numerical targets, and repeatedly asserting that sanctions would be imposed in the event of non-fulfillment of the "promise," hinted that Sect. 301 would be applied. Nonetheless, under the new agreement, foreign semiconductor access to the Japanese market steadily improved. The share of foreign semiconductors increased from 16.5% in the third quarter of 1991 to approximately 30% in the fourth quarter of 1995. When the agreement's deadline approached, the United States sought another new agreement, but Japan insisted on the termination of the agreements. Meanwhile, in May 1996, the Japan Electronics and Information Technology Industries Association presented a proposal titled "Future industrial cooperation on semiconductors" to the US Semiconductor Industry Association (SIA), in which it advocated the establishment of a World Semiconductor Council (WSC). In June, the Japanese government proposed to the US government the establishment of a Global Government Forum (GGF) regarding semiconductors. Japan had, that same month, obtained agreement for a multilateral forum from the EU, which was critical of Japan-US bilateralism. Japan's approach was successful, and when the new semiconductor agreement expired in late July 1996, it was replaced by a framework of multilateral cooperation built chiefly on the support of Japan's public and private sectors. Japan and the United States agreed to the establishment of the WSC and called on other countries to establish the GGF. A decade of bilateral agreements on managed trade ended amid the shift toward multilateral cooperation based on WTO rules and market principles.

### 3.3.4 Steel and Anti-Dumping Suits

At the beginning of the 1990s, negotiations were pursued on establishing a multi-lateral steel agreement (MSA) through the GATT Uruguay Round, but the talks that started in July 1990 ended in stalemate (Abe 2013, p. 107; Yamazaki 2011, p. 258). With the failure of the MSA and the revocation of the Voluntary Restraint Agreement (VRA), US steelmakers, faced with deteriorating earnings, reasserted their protectionist stance on trade and from January to June 1992, the major US steelmakers filed 84 large anti-dumping and countervailing duties complaints. Complaints and appeals continued thereafter, and in February 1999, the US Department of Commerce issued a provisional decision on dumping that in reality initiated sanctions against Japanese steel products. The following April, following its determination that illegal dumping was occurring, the US imposed anti-dumping duties on Japanese steel. The Japanese government regarded these measures as violating WTO rules in that they (1) overestimated the injury to US industry, (2) overvalued the dumping margin, and (3) were based on unfair investigative procedures. In October 1999, Japan submitted an appeal to the WTO. The Final Report of the WTO Panel in February 2001 basically accepted Japan's argument and found the US dumping margin and damage determination in violation of the Agreement. Nevertheless, US companies continued to file complaints in the 2000s.

As mentioned above, Japan had ultimately acceded to America's demands in the negotiations that predated the "results-oriented model," although remaining opposed to them. Nevertheless, in the Framework talks from 1993 forward, Japan took the stance that it would not enter negotiations on issues raised in the context of Sect. 301 and strongly opposed the introduction of "objective criteria." The difference in interpretation between the US and Japan over numerical targets in the US–Japan Semiconductor Agreements of 1986 and 1991 generated strong resistance on Japan's part. Still, the auto and auto parts settlement had a significant impact because the announcement of a purchasing plan by Japanese manufacturers complete with numerical values had enabled the US to save face, and in that sense, the Framework talks followed a pattern of reaching agreements that were deliberately ambiguous.

Furthermore, the Clinton administration's unilateral (Sect. 301-based) and bilateral (negotiation-based) approaches to trade negotiations were in clear contradiction to the multilateral (GATT Uruguay Round) thinking that the US was advocating in other spheres. The 1995 reorganization of GATT into the WTO was a blow to America's unilateral and bilateral approaches. However, it was just at that time that the trade friction between Japan and the US began to subside.

### 3.3.5 Japan–EU Trade Friction Subsidies

The integration of the European Union (EU), which was launched when the February 1992 Maastricht Treaty went into effect, strengthened Europe's international negotiating power. Economic relations with Japan moved from confrontation toward

cooperation, with trade friction between Europe and Japan gradually subsiding. This was in part because of the prolonged recession in Japan that followed the bursting of the bubble (Abe 2013, p. 166).

A good example was the resolution of the issue of auto exports. Since before the integration, the EU had been apprehensive that the import of Japanese-made automobiles would disrupt European markets, and sought Japanese cooperation during the period leading up to complete liberalization (up to 1999). The EC Committee and MITI came to agreement in July 1991: the EU committee promised that it would not impose measures restricting the import of Japanese automobiles, and MITI in turn undertook (1) to monitor export trends during the period of transition, and (2) to clarify that, of the total projected demand for automobiles in the EC market (including former East Germany) as of 1999, Japan expected exports of 1.23 million automobiles, and that it would monitor auto exports to align with this expectation.

Japan–EC cooperation advanced rapidly. In 1994, the EU abolished discriminatory quantitative restrictions (QR) against Japan, and Japan and the EU commenced talks on regulatory reform and on a Mutual Recognition Agreement (MRA). The EU Ministerial Conference of May 1995 adopted new policies regarding Japan (*Europe and Japan: The Next Steps*) and announced the building of a relationship based on “political dialogue and cooperation,” but on the economic front most noteworthy was the “Joint report on Japan–EU trade promotion measures” presented by the EC Committee and MITI at the November 1994 EU Ministerial Conference. It was a summary of trade promotion measures being advanced by Japan and the EU, and represented recognition on the EU’s part that Japan’s import promotion policies were contributing to imports from the EU. Further, the report on joint promotion of industrial cooperation made clear the contributions of (1) the Japan–EU industrial policy/industrial cooperation dialogue ([a] industrial cooperation on such existing sectors as household appliances, office machinery and computers, and auto parts; [b] the exchange of policy opinions regarding markets with promise for the future and deregulation; and [c] the establishment of an information policy working group); (2) JETRO’s work on industrial cooperation; and (3) the establishment of the Foreign Investment in Japan Development Corporation (FIND). In this way, the economic relationship between Japan and EU advanced firmly on the path toward improvement.

### ***3.4 Import Expansion and Market Opening***

#### **3.4.1 Import Expansion Policies**

The July 1989 G7 Grande Arche Summit in Paris sought new responses to trade friction, including the clear statement in its declaration that trade surplus countries had a responsibility to increase imports. In January 1990, the Japanese government announced a three-year comprehensive import expansion policy and it began implementing this plan beginning in April (Abe 2013, p. 190). The pillars of the plan were: (1) implementation of tax incentives to promote manufactured imports;

(2) elimination of tariffs on 1,004 industrial products; (3) substantial expansion of policy financing to expand imports, (4) a “\$100 million grass-roots import promotion project” sending experts overseas through JETRO for long- and short-term periods through JETRO and expanding the national budget to establish and maintain economic internationalization centers in every prefecture.

The first of these had been considered within MITI from about the mid-1980s. The Finance Ministry opposed the idea, saying that it would not benefit consumers to give preferential treatment to trading companies and import agents. It further argued that by favoring the importation of semi-finished products and machinery, Japan might be unable to avoid their being processed and re-exported, in which case the tax incentives for imports would become a tax system for expanding exports. However, the final report of the Japan–US SII talks cited “creation of a tax system for promoting manufactured imports” and because this was a de facto “international commitment,” the Finance Ministry softened its stance. In business circles, the trading companies involved in expanding imports and the auto and electric industries with the greatest competitiveness showed an inclination to agree with the idea, but the textile, steel, and chemical industries that were then being overtaken by the newly industrialized economies (NIEs) were concerned about the negative impact of import expansion. As the specifics of the plan became clearer, however, greater consideration was given to those burdened by the obligation, and the relative interests of the more advantaged sectors were curtailed.

Even so, a tax system to promote imports of manufactured goods was initiated from April 1990 to apply for a period of three years. Items subject to import promotion were those “imported by the importers themselves (including on consignment)” and designated by “MITI Notification” as machinery, electrical equipment, and chemical industry products suitable for import promotion, in accordance with Cabinet Order. With regard mainly to items not subject to customs duties, the importer was allowed to reserve funds within 20% of the increase in imports in a system called the “reserve fund for developing a domestic market for imported products.” Additionally, preferential treatment measures were adopted, such as tax deductions and bonus depreciation systems. The plan was extended by two years in 1993, and the conditions were relaxed and preferential policies expanded. A further two-year extension was made in 1995, and clothing items and automobile parts were added to the list.

In 1995, MITI evaluated the import promotion system as follows: “In FY 1990 and 1991, the value of products imported under this tax system expanded by 5% more than imports overall, and this tax system was effective.” In fact, the ratio of targeted products to total imports increased from 20.4% in FY1989 to 26.6% in FY 1994, amidst an overall decrease in imports. But because tax reductions based on these measures in this period were falling, the causal relationship with import expansion was not necessarily clear. Rather, the significance of the import promotion tax system should be seen in the impact of announcing overseas that the Japanese government was aggressive about expanding imports.

### 3.4.2 JETRO's Import Promotion Projects

JETRO, which was founded in July 1958 to promote exports, expanded its role to import promotion from the late 1980s on and began managing exchanges on investment and technology with developed countries in Europe and with the United States, as well as economic cooperation with developing countries (Abe 2013, p. 210). Prior to that, JETRO was undertaking such projects on a small scale based on the government's budget for import promotion projects. With the approval of a large supplementary budget of 6.7 billion yen for import promotion measures in FY 1989, import promotion became a major pillar of JETRO activity. Its activities included: (1) supporting foreign exporters to Japan, (2) establishing import promotion hubs, and (3) providing information. The first of these involved dispatching specialists overseas and sponsoring exhibitions of samples. For example, in FY 1990, JETRO put together a project in which private-sector representatives with international business experience were publicly invited to go to Europe and the United States for periods of two to four years to unearth promising prospective export products. At the same time, JETRO dispatched import specialists on a short-term basis. They made purchases of samples of promising products and promoted their exhibition at conventions in various parts of Japan. The import promotion projects pursued by JETRO from around 1990 came to an end in November 2002, but in the meantime their main aim was to support the exports to Japan of products from the Western countries with which Japan was experiencing the greatest friction.

Another organization also had the mission of promoting imports: the Manufactured Imports Promotion Organization (MIPRO) was established in February 1978, and focused on exhibitions, information provision, and the sale of merchandise (Abe 2013, p. 222). Going into the 1990s, MIPRO joined JETRO in expanding its import-promotion activities.

As MITI stated in its evaluation of the import promotion tax system, the primary significance of these measures lay in their showing the Japanese government's commitment to import expansion and in thereby allaying some of the friction on trade. For Japanese consumers, the perception of high-cost imported goods from the advanced economies of Europe and America changed with the advance of the bubble economy, as brand items and the like became familiar objects to affluent buyers. Cheaper goods imported from China were also coming into use. Imported products thus became part of daily life, and in that sense these import promotion measures had a widespread impact.

### 3.4.3 Action Programs for Market Opening

In the 1990s, the emphasis began to shift to import promotion policies giving direct incentives to expanding imports through JETRO and other means, as discussed above (Abe 2013, p. 283). However, because it was not easy to dispel the image that the Japanese market was closed, efforts to open up the market continued. At the Trade Conference in November 1995, (1) the further promotion of deregulation and (2)

“Guidelines for Improving Access to Japan Markets” were established to serve as a pillar in the improvement of business practices.

These steps were based on the Deregulation Action Program decided on in March, which asserted that: “The regulations on entry and on facilities, which were instituted with an eye to coordinating supply and demand in competitive industries, require a radical reassessment, even including the possibility of abolition, while taking into account the content and nature of the business in question.” In place of more externally oriented market-opening policies, it was stressed that the standards and conformity assessment systems and labeling systems would “be brought into international conformity” in line with overseas demands. Furthermore, the Trade Conference proposed assessment surveys of the actual situation regarding access to the Japanese market.

With the presentation of these policies and the results of the surveys that followed, the government announced a Cabinet Decision in April 1999 on a bill titled Law on the Consolidation and Streamlining of Standards and Certification Systems Relating to the Ministry of International Trade and Industry. The law recognized the development and introduction of new technologies and improvements in quality control, and expressed the intent to review the division of roles between the public and private sectors and to build a system that would utilize private-sector capabilities and streamline regulation. In concrete terms, it permitted the entry of private sector companies into the government-designated agencies that conducted inspections and certifications. With the passage of this bill in August, the deregulation that accompanied further legal reform in various sectors continued, and the reform of public regulation in the standards and conformity system progressed as well.

### ***3.5 Security Trade Controls and the Transformation of Policies on Exports***

#### **3.5.1 Changes in Security Trade Controls**

The Coordinating Committee for Multilateral Strategic Export Controls (COCOM) was a gentlemen’s agreement among nations of the free world, aimed at preventing cutting-edge technology from flowing out to the Communist sphere. Its regulations consisted mainly of objective checks of the destination countries and technical specifications of the export items, based on the so-called COCOM List of controls (Abe 2013, p. 336). The Japanese government issued export licenses under this agreement, but in 1987, when the Toshiba Machine Co. was found to have exported machine tools to the Soviet Union in violation of the rules (Toshiba–Kongsberg Scandal), the government was forced to consider measures to prevent a recurrence of such violations. MITI responded with the “Measures to prevent the recurrence of illegal exports of strategic materials (interim report)” in July and expanded and strengthened the examination and inspection systems. In addition, the Foreign Exchange and Foreign

Trade Control Law was partially revised in September to include stronger sanctions. The Bulk License System was inaugurated in April 1989 and procedures were simplified such that repeat transactions by exporters who undertook appropriate internal oversight would receive maximum two-year licenses rather than having to reapply with every transaction.

In the latter 1980s, however, due to political democratization and economic liberalization in Eastern Europe, the function of COCOM's export controls receded, and COCOM was abolished in March 1994. Nevertheless, with the emergence of regional ethnic and religious conflicts, a cautious stance was still needed for the transferal of weapons. Rather than restricting sales to certain countries, as COCOM had done, it became necessary to examine the end users and end use of the cargo. The abolition of COCOM was completed after agreement was reached to establish a new export control system to replace it.

Japan, which had based its administration of COCOM regulations on the "three fundamental rules concerning weapons exports," was familiar with the non-proliferation approach to export controls that were now being explored anew. The government therefore decided to participate actively in the new approach (Table 5).

International efforts in this area included the December 1995 Wassenaar Arrangement on Export Controls for Conventional Arms and Dual-Use Goods and Technologies (Wassenaar Arrangement, WA), agreed upon by 28 countries. In 2002,

**Table 5** Wassenaar Arrangement (WA) and the former COCOM

Item	WA	Former COCOM
How the export controls work	Establishment of cooperative regulations based on detailed information exchange /Judgment regarding approval of individual projects is at the discretion of each country	Unanimous agreement
Regulated products	Both weapons and weapons-related general-purpose goods	Both weapons and related general-purpose goods (in reality only the latter)
Regulated regions	Exports to all regions (see note)	Communist countries
Participating countries	Open to new participating countries (including Russia, Eastern European countries)	Western countries only (including Japan)

In WA's operations, developed countries shared a concern about exports to four countries (Iran, Iraq, Libya, and North Korea), so Japan, too, decided to impose strict regulations on exports to these areas.

*Source* Abe (2013, p. 353)

33 countries were signatory to the Arrangement. It was a non-binding gentlemen's agreement among countries that were able to manufacture and supply conventional weapons and related items and that were willing to strive for their nonproliferation. The WA placed export controls on a wide range of general-purpose items that could be used for military purposes, and participating countries were asked to submit reports on any transfer of these items.

A new framework was also added regarding weapons of mass destruction, including nuclear, biological, and chemical weapons, and the missiles carrying them, using the international framework that predated the collapse of the Cold War regime. Japan, following the use of chemical weapons in the Iran–Iraq War, had already chosen on its own in 1984 to require MITI licenses for the export of substances that could be used for chemical weapons. Actual management of the materials took place through a method called a warning or “heads up,” but in March 1993 the Know Regulation (catch-all regulation) in use in other countries was introduced to the Industrial Structure Council's Security Trade Controls Committee and was recommended for use in Japan. Catchall regulations target the export of all goods and technologies except wood products and food and were called “Know Regulations” (“knowing” that the exports were being used in weapons development). MITI revised the Foreign Exchange Control Order, Export Controls, and other regulations in October 1996, and was proceeding to make the shift to catchall regulations. However, the new method was also called a “catch-some regulation” due to the limited number of items covered, and these were modest measures compared with catchall regulations. Subsequently, in April 2002, almost all of the target items were shifted into a full-fledged catchall regulation system, and many companies involved in exports became subject to regulation and had to seek Security Export Control assessment of whether permission would or would not be required.

### 3.5.2 Changes in Export Policy

As mentioned in Chap. 1, the Export and Import Transaction Law (“Transactions Law”) of 1952 was aimed at preventing unfair export transactions, but in the 1980s, its purpose expanded to countering economic friction with other countries and it thus became a powerful policy tool for carrying out voluntary export restraints. In November 1983, the government revised portions of the Transactions Law Enforcement Order, but this was because in July, the US government had imposed curbs on the import quantity of three specialty steel products. Japan decided to make these items subject to the export approval system so that they would not exceed US regulatory limits.

Simplification or abolition of the agreements based on this law was sought in the 1990s, however, from the point of view of deregulation (Abe 2013, p. 325). The number of agreements was reduced, and by January 1996, only eight such cases remained. In the latter 1990s, deregulation advanced with the March 1996 Cabinet Decision titled “On revision of the plan for promoting deregulation,” and in 1998, the

requirement for the MITI Minister's approval of exports based on the Transactions Law was abolished.

Meanwhile, the 1957 Export Inspection Law, which had functioned to support the reputation of export goods, was gradually brought under review. What had been more than 400 designated cargo items in 1973 was halved in 1980, and drastically reduced to 72 in 1990 and 39 in 1995.

The deregulation of export control procedures that had been progressing since the late 1970s was, in the mid-1990s, implemented through the revision or elimination of laws and regulations, or in other words, as part of a regulatory reform that itself significantly changed the policy system. In April 1994, the Export and Import Transaction Council of April decided on the early termination of the Law on the Unified Trademark for Export-Oriented Products by Small- and Medium-Sized Enterprises, which had been established in May 1970 to help exports recover. The Council also resolved to "abolish, likely in about three years," the Export Goods Design Law. In May, the Export Inspection and Design Promotion Council reported its findings that the Export Inspection Act should be abolished in about three years. MITI's March 1995 Deregulation Promotion Plan, which covered 148 items, did not make its main focus the items addressed by either of these laws, but stated clearly that these decommissioning bills should be submitted, the target timing being the regular Diet session in FY 1996. The Export Inspection Law and Export Design Law were thus brought to an end.

MITI also reviewed the Export/Import Transaction Law on the principle that its abolition was desirable now that exemptions to the Antimonopoly Act required review. In accordance with the guidelines of the Deregulation Promotion Plan, the Export/Import Council in March 1996 reported the abolition of all except a portion of its provisions. MITI, from the standpoint of actively promoting deregulation, submitted an amendment bill to the FY 1996 Diet session.

This led to the abolition of Export-Import Associations, and the only cartels that remained were those whose impact on the domestic market was neutral and those charged with implementing the WTO Agreement. In November 1995, the Council on Foreign Exchange and Other Transactions, which had been discussing changes to the Foreign Exchange Law, issued a final report in January 1997 that highlighted simplification of the system. Amendment of the Foreign Exchange Law became the front runner in the Japanese-style big bang (financial system reform) ordered by Prime Minister Hashimoto in November 1996, and the "foreign exchange" framework shifted from a "managed" system to a system based on the "principle of freedom." With the significant changes underway in the principles underlying currency trading, simplification of MITI's export control system also became inevitable, and in December 1997, MITI responded by revising portions of the Export Trade Control Order.

## 4 Measures for an Affluent Society

### 4.1 *Promoting an Advanced Information and Telecommunications Society, IMS Programs, and the Home Health Care and Rehabilitation Equipment Industry*

#### 4.1.1 **Toward an Advanced Information and Telecommunications Society**

The Information Superhighway (National Information Infrastructure, NII) initiative announced in September 1993 by the Clinton administration acted as a stimulus for Japan's preparations for its information infrastructure. MITI and the Ministry of Posts and Telecommunications (MPT) explored policies for developing an advanced information society, not from the point of view of the suppliers, meaning networks, but with an emphasis on the user and therefore on content, or the content of information (Hasegawa 2013, p. 127, p. 755). This view was reflected in the May 1994 announcement of MITI's "Program for the shift to an advanced information society" and the MPT Telecommunications Council's "Toward reforms for a 21st-century knowledge-based society."

The Tsutomu Hata Administration in June 1994 established a High-Level Information Transmission Promotion Headquarters; the Tomiichi Murayama Administration in August that year did the same and began developing concepts for a Japanese version of the superhighway. Murayama's Information Promotion Headquarters decided in February 1995 on "Basic guidelines on the Promotion of an Advanced Information and Telecommunications Society." The ministries and agencies began advancing policies to this end, which were implemented by the Information Promotion Headquarters and councils of specialists. These basic plans understood "advanced information and telecommunications society" to mean the realization of a new socio-economic system for the free creation, distribution, and sharing of information and knowledge, and for harmonizing lifestyle and culture, industry and economy, nature and environment as a whole. They said that these goals required the prompt construction of information and telecommunications infrastructure. Furthermore, the plans also stressed that this process needed to be advanced under private sector leadership with only a limited range of government activity. Government policies were needed to (1) make the public sector information-based, (2) review the various systems for upgrading information transmission, (3) establish network infrastructures, (4) adopt measures on copyrights to respond to the shift to an information base, (5) adopt measures on security and privacy, (6) assure joint operability and joint connectivity, (7) supply the software, (8) undertake basic technological development, (9) nurture human resources, and other measures. Based on these concepts and their associated policies, 1995 was called "the first year of the internet," indicating the intent of upgrading information networks going forward.

Previously, based on the “Urgent recommendations: the new software age” issued by MITI in December 1992, policy priorities focused on “facilitating an environment for a software market” (Hasegawa 2013, p. 758). The “Urgent recommendations” included (1) establishing market mechanisms based on raising the level of software independence, (2) establishing basic conditions for the establishment of a market mechanism, (3) making an efficient supply system (through nurturing human resources and other means), (4) expanding the supply of packaged software, (5) developing user responses (such that users think of software not as an accessory to hardware, but as having value in and of itself), (6) enabling fair relationships between hardware and software vendors, and (7) developing government responses (statistical infrastructure, improvement of government procurement market, and so on).

MITI promoted this shift to an information economy in the hopes that it would act as an engine for economic recovery. Public projects for information transmission meant the construction of research facilities, the provision of computers and other information transmission equipment, and the promotion of cutting-edge technology and R&D by new industries as part of economic recovery plans. Further, from FY 1996, the government gradually expanded the areas it addressed and began promoting an “information industry policy” that would assure the interoperability of systems. It also took on the promotion of the software industry. Prior to FY 2000, MITI had thus devoted a large budget to information-related policies, and the supplementary budget related to software in particular emphasized demand through the offices of the Information-Technology Promotion Agency.

#### **4.1.2 Promotion of e-commerce**

MITI’s above-mentioned “Program for the shift to an advanced information society” complemented and strengthened the role of government in private sector initiatives. Specifically, this meant promotion of an advanced information society in both the public and the private sector. The future industrial information systems as envisioned by this program were electronic commerce (EC) and computer-aided logistical support (CALS) (Hasegawa 2013, p. 780).

As part of its EC promotion projects, MITI established the Study Group for Improving the Environment for EC as a private advisory body of the Director-General for the Machinery and Information Industries Bureau and the Director-General for Commerce and Distribution Policy. In April 1995, the Study Group compiled an interim report on the legal issues surrounding e-commerce. The EC Promotion Council of Japan (ECOM) was established in January 1996 as a voluntary private sector organization for supporting experiments in e-commerce. Its activities included studies of technological development to improve the common infrastructure for EC, support and coordination of experiments in EC, and studies of institutional issues in e-commerce. Meanwhile, inter-company e-commerce was also promoted, with public offerings and expanded support for such projects by the Electronics Policy Division and the IPA (Information-technology Promotion Agency) in January 1996.

The CALS advanced in the 1990s had been devised by the US Department of Defense (DOD) in September 1985 as a measure for rationalizing DOD procurement of equipment. To promote CALS, MITI assigned approximately 400 million yen in its FY 1995 budget to R&D on integrated information systems for production, procurement, and operations support and established a technical association specifically focused on production, distribution and operations of thermal power plants.

Policies for advancing the information basis of the public sector were also promoted in the 1990s. These were in part economic stimulus projects included in the FY 1993 third supplementary budget and the FY 1994 budget in response to the weakening of the private sector due to the collapse of the bubble economy. Based on these plans, MITI formulated its own “Administrative Information Technology Promotion Plan (FY 1995–1999 Five-Year Plan)” and promoted improvements in the efficiency and sophistication of administration, including improved public access for citizens and paperless administrative services. These MITI-specific projects were regarded as pilot projects that could result in models for the government at large and led to the government’s establishment in January 1997 of the “Kasumigaseki Wide Area Network (Kasumigaseki WAN),” a communication network enabling ministries and agencies to exchange e-mail.

#### **4.1.3 Promotion of IMS Programs**

In August 1989, the Factory Automation (FA) Vision Council, a private body under the Director-General of the Machinery and Information Industries Bureau, compiled a report on the outlook for factory automation. The report found that the conventional interpretation of FA as meaning the automation and integration of all business activities did not adequately convey the range of innovation in production technologies. The report called for planning for the coordination of people and machinery and for viewing the production activities of industry in their entirety as an integrated system. Intelligent Manufacturing Systems (IMS) accordingly became the first policy priority (Hasegawa 2013, p. 258).

The IMS policy was notable in its promotion of collaborative research programs internationally, an approach that flowed from separate strands of development. First was the existing industrial machinery policy, which led to policy involvement in the development of unmanned factories, the robotics industry, and mechanical systematization. Second was the ongoing trade friction with the outside world, which made forwarding systems for international cooperation a policy priority. While utilizing a range of intelligent activities in manufacturing industries and integrating intelligent machines with people, IMS could flexibly integrate and coordinate all corporate activities from order entry to design, production, and sales: it was thus defined as a system for improving productivity. In order to achieve this goal, MITI urged that Japan become an advocate for international collaborative research and development in the field of production technology.

This joint research was based on an awareness of the need to address problems shared by industrialized countries, including the hollowing out of industry and decline in manufacturing technology, changes in the working environment and the loss of manufacturing industries, the diversification of consumer needs, the emergence of “isolated islands of automation” (partial automation) at manufacturing sites, the globalization of existing technologies, the insufficient systematization of current technologies, and other issues. Joint research was expected to contribute to the effort to overcome these challenges by (1) avoiding duplicate investment in development resources, (2) developing dream technologies, and (3) unifying international understanding of production technologies. Essential to the smooth development of this joint research was the handling of intellectual property rights, and here, too, the IMS programs created international regulations and required that all participants abide by them.

With these conditions, IMS steadily added more projects year by year, and in 1999, the program’s fourth year, 16 R&D projects were underway (Japan participated in 12 of these), with a total of about 400 participating enterprises, universities, and research institutes, including over 100 Japanese companies and universities. In addition, participating countries submitted proposals for over 30 new projects.

However, following the reforms of the public benefit corporation system in the 2000s, national budget allocations to public interest corporations like the IMS Center were deemed inappropriate. This made various changes necessary, such as the replacement of IMS Center leadership by the New Energy and Industrial Technology Development Organization (NEDO). It also became apparent with Phase II that the projects taking place abroad were not necessarily active. In April 2010 it was determined that IMS had sufficiently fulfilled its original aims, and the curtain was closed on its historic role.

The Council on Basic Issues in the Space Industry compiled a summary report in July 1996. Entitled “Toward the takeoff of the space industry,” it proposed measures for promotion of the space industry. However, despite the hopes expressed in the report, budget allocations depend heavily on public demand in Japan, meaning that budget increases, and therefore development of the space industry, faced significant financial constraints.

#### **4.1.4 Promotion of the Home Care and Rehabilitation Equipment (“Welfare Equipment”) Industry**

Among MITI’s policy initiatives in the mid-1970s were subsidies and leasing systems for R&D in welfare equipment, launched in FY 1976 (Hasegawa 2013, p. 573). The subsidies began as an R&D consignment system with a budget of 300 million yen, with measures such as establishing venues for joint research by creating a Research Laboratory for the Medical and Rehabilitation Technology Research Association under the Law for Mining and Manufacturing Technology Research Associations.

The leasing systems arose from the understanding that the generally high cost of welfare equipment would act as a barrier to its spread. Methods were explored by

which users would not be required to make large outlays of capital on purchasing the equipment, by making it available on a leased basis at relatively low cost. Since the leasing companies would be making bulk purchases from the producers, it was anticipated that a leasing system could increase sales as well. The leasing enterprises' purchases of the equipment were financed through the Development Bank. While this forced a large reduction in the 1980s scale of operations, the financing system continued until 1991 and thereafter as well, although the headings of the line items changed.

New developments arose in the 1990s on policies for the welfare equipment industry. One of the triggers for these developments was the June 1992 report of the Agency of Industrial Science and Technology, which took up the issue of supporting practical developments to address aging, and which also proposed that such subsidy policies be promoted to "enlarge measures complementary to the market principle." The February 1993 report by the Industrial Technology Council's Subcommittee on Policies on Welfare Equipment Technology pointed out problems in the research and development of such equipment and, significantly, urged that "it was necessary to consider appropriate legal measures." Accordingly, the Law Concerning the Promotion of Research and Development and the Diffusion of Social Welfare Equipment, jointly sponsored by MITI and the Ministry of Welfare, was passed in May 1993 and came into effect in October.

After the implementation of the Welfare Equipment Law, the Machine Information Bureau in FY 1995 began seeking data on conditions in the industry, for example with its "Survey on development trends in welfare equipment." In April 1996, a consultation group was established as a private advisory body to the Director General of the Machine Information and Commerce Bureau, and carried out surveys with the aim of better organizing the basic direction of industrial policy. It concluded that new markets could be developed through the effective use of market principles, to prompt the industry to exploit the potential for industrial development and compete to develop products oriented to consumer needs. Based on the survey results compiled by MITI's Commerce and Information Policy Bureau in March 2002, the market grew steadily from its FY 1993 level of 773.1 billion yen, but FY 2000, at 1,138.9 billion yen, was the first year to show a decrease (0.3%) from the previous year. Although expectations had been high for this new sector of industrial policy given the aging society of the twenty-first century, satisfactory results were still proving hard to come by.

#### **4.1.5 The Promotion of Biotechnology**

The Bio-industry Office of the Basic Industries Bureau believed that advances in biotechnology would contribute to the development of ecologically friendly products that use raw materials derived from renewable organisms, and from the late 1980s promoted R&D with the expectation that applications would soon be forthcoming (Yamazaki 2011, p. 370). With this aim, MITI gave its support to projects in DNA analysis, the development of biodegradable plastics, and bioremediation.

For the DNA analysis project, the Kazusa DNA Research Institute was founded in March 1991, in coordination with Chiba Prefecture plans based on the Technopolis Plan. It was intended to develop analyses of the structure of DNA, research on analytical techniques, research on DNA functions and their applications, and the collection and provision of data pertaining to DNA. It also would promote the creation of new industries, advancements in the industrial structure, and advances in chemical technologies. The research facility was completed in October 1994, and the first project was an analysis of cyanobacteria. In April 1996, the Helix Research Institute Corporation was established within the laboratory to analyze complementary DNA (cDNA) and its functions. Part of the research could not be expected to yield useful functions in the near term because of numerous international patent applications. Actively publicizing that research beginning in February 2000 played an important role by preventing further patenting. Other DNA analyses of microorganisms and related items were promoted as well, and these were boosted by policies to establish laboratories and present R&D plans that took into account the needs of people and the environment.

The October 1998 “Report of the Council on becoming a bio-industry nation in the 21st Century” recognized that, in the field of biotech research, the US dominated in human genome analysis and that Europe and the US between them dominated such intellectual property rights as gene patents, and that therefore the gap between Japan’s bio-industry and that of Europe and America was only widening. The cause was understood to be the inadequacy of many systems, including R&D, human resources, technology transfer, and financing, and also the lack of organic collaboration. Thus, although the level of basic research was not inferior to that of Europe and the US, the gap was great when it came to turning that research into enterprises and industries. To reduce the disparity would require strengthening collaboration between industry, academia and government, integrating research and industry geographically, improving financing methods, and so on.

#### **4.1.6 Efforts to Create a Biotech Industry**

Efforts to make basic research commercially viable were accelerated, based on the December 1998 interim report and February 1999 final report by the Economic Strategy Council (established in August 1998 directly under the Prime Minister), which said that nurturing the biotech industry was a principal target for Japan’s twenty-first-century national technological development (Yamazaki 2011, p. 391).

The “Industrial Revitalization Plan” decided by the Cabinet in January 1999 entailed the provision of support for venture businesses’ technological development. In this connection, MITI strongly recommended biotechnology-related projects, and its policy was reflected in the Industrial Revitalization Plan itself. The Director-General of the Science and Technology Agency and the Ministers of MITI, Education, Welfare, and Agriculture, Forestry and Fisheries, produced the “Basic Plan for Creating a Biotechnology Industry.” The “Basic Plan,” although acknowledging that the biotech sector could be expected to increase high-quality employment and

opportunities for new business, addressed biotech businesses that faced delays and called for (1) accelerating basic research on genome analysis, (2) strengthening support for commercializing research, (3) strengthening R&D aimed at biotechnology applications, and (4) promoting the advancement and utilization of biotechnology in universities. On this basis, the five ministries and agencies developed the “Basic strategy for creating a biotechnology industry” in July 1999. This included proposals to expand competitive financing, upgrade incentives, and facilitate the efforts of national university faculty members to engage in business, in order to strengthen research and development systems that produced creative outcomes.

Safety guidelines were reviewed in parallel with these efforts. With regard to safety in biotech industrialization, MITI announced guidelines for Recombinant DNA Technology in 1986, and the Chemical Products Council deliberated on the safety of industrialization plans formulated and planned by business operators. In September 1997, MITI established a Guidelines Examination Subcommittee reporting to the Recombinant DNA Technology Subcommittee of the Chemical Products Council to review the subject.

Its March 1998 report titled “On an ideal plan for the future industrialization of recombinant DNA” called for the following: (1) avoiding duplication in the safety assessments and examinations found in the existing guidelines and simplifying procedures, (2) alleviating the burden on businesses that were unsure how to evaluate their position because the Good Industrial Large-Scale Practices (GILSP) were designed principally to “minimize leakage,” and (3) reviewing the scope of the government’s certifications and simplifying those procedures as well. Deregulation of the industry was advanced based on these proposals.

#### **4.1.7 Globalization of the Petrochemicals Industry**

In the latter 1980s, the petrochemical industry faced the question of how to respond to changes in its immediate environment, including the plans for new development of large-scale petrochemical plants in the Asian NIEs, Saudi Arabia, and Central and South America, uncertainty about the future of the global economy, and fluidity in the conditions surrounding raw materials.

In January 1989, MITI consulted the Chemical Industry Committee about “the petrochemical industry of the 1990s and ideal strategies” and received the Committee’s report in June 1989. Based on the three principles of internationalization, cooperation, and individuation, the report cited seven issues for policy to address: (1) raw materials, (2) demand, (3) sales and distribution, (4) security, (5) environment, (6) R&D, and (7) internationalization (Yamazaki 2011, p. 87).

Policy on raw materials included an extension of the tax exemption for naphtha that had been in effect since the 1980s and the addition of a tax exemption for heavy LNG from April 1992. Additionally, with deregulation in 1995, petrochemical businesses were permitted to import oil. Not only were raw material procurement costs rationalized through tax exemptions and deregulation, but also the foundations were laid for diversifying the raw materials in use.

Internationalization issues included the promotion of free trade through progress in tariff reductions and the issue of yen appreciation. Based on the report of the International Subcommittee of the Petrochemical Products Demand and Supply Council, the Basic Chemicals Division focused on the factors driving the domestic and international price gap in petrochemical products. These included the large number of product grades (varieties), services to customers, just-in-time delivery, and details of logistical services such as frequent, small-lot deliveries. This led to the decision to consider countermeasures for those market environments where price preferences were strengthening. As indicated in the February 1996 Report of the Council on Basic Issues in the Petrochemical Industry, "The cost competitiveness of Japanese petrochemical companies is not internationally inferior at the production stage." Based, therefore, on the recognition that "if the government improves the business environment and adopts appropriate measures, [Japanese petrochemical companies] will be able to reach a par with overseas enterprises," the decision was made to pursue efforts to establish core businesses for the global market environment.

Regarding sales and distribution, concerns were mounting in the 1990s about the commercial system, specifically such areas as logistical costs and business practices. In 1990, MITI issued guidelines for improving business practices, and in 1992, it formulated guidelines for rationalizing logistics in 21 industries, such as raw materials. These sought to assure transparency, to remove impediments to the rationalization of business operations, and to improve international harmonization. For example, when, based on the 1994 results of FY1993 survey data, improvements were sought in the commercial practices related to resins for polyolefin film, a Commercial Practices Committee was established in the Council on Basic Issues in the Petrochemical Industry in February 1995. The Committee issued a report saying that reliance on the price mechanism would be the most efficient approach to strengthening the competitiveness of resin and resin-processing manufacturers. To that end, the Committee took up the issue of correcting the commercial practice of "ex post facto pricing." Ex post facto pricing was a trading method in which the price was not finalized at the selling stage, but after the fact. The purpose of the system was to support the many medium-sized, small, and very small resin manufacturers that made up the industry. The practice was deemed to be restrictive, however, and to be hindering reasonable corporate management in that it made it hard to forecast revenue and thereby increased the cost of price negotiations. Reform therefore became desirable. By reaching out to the industry's companies through the Petrochemical Industry Association, it was possible to revise the practice, and as a result, "pre-pricing," which in 1995 was used in only 67% of low-concentration polyethylene transactions, accounted for 94.4% of transactions by 2001.

## 4.2 *Establishment of the Environment Law and Promotion of Recycling*

### 4.2.1 The UN Environment Programme and International Cooperation

A number of developments in the 1970s continued to determine the framework of response to international environmental problems (Takeda 2011, p. 475). In 1972, the International Environmental Action Plan was formulated based on the decision of the United Nations Conference on the Human Environment. In May of the same year, the OECD confirmed the Polluter-Pays Principle (PPP), and in November 1974, it adopted the “Declaration on Environmental Policy” and a 10-point action plan. Multilateral cooperative systems of this kind were also advanced on the bilateral level. For example, the Japan–US Environmental Protection Cooperation Agreement was signed in August 1975, and a joint planning coordination committee was established.

With the global economic downturn from the latter 1970s into the early 1980s, international efforts on environmental issues lagged. However, in July 1980 under US President Jimmy Carter, the Council on Environmental Quality and the State Department issued a report titled *The Earth in 2000*, triggering the call for renewed movement in this area. Japan’s Environment Agency produced a report emphasizing an international approach and presented this in May 1982 at the UN Conference on the Human Environment. This led to the establishment of the World Commission on Environment and Development, which was charged with laying out an ideal vision of the global environment. The Declaration issued by the Commission in Tokyo in February 1987 pointed out the importance of sustainable development, meaning that the upgrading and improvement of the environment and resource base should take place through development, which would give rise to further progress and development.

Meanwhile, within Japan, regulatory measures were sought to address chlorofluorocarbons (CFCs), which had already become a problem in the US in the 1970s. MITI took a cautious stance towards CFC regulation by the Environment Agency. The September 1980 Basic Industries Bureau report “On Freon gas” opposed regulation on the argument that the science was not yet sufficiently clear. The Bureau’s view that a clear scientific basis was needed to enact regulation was much the same as that of the Industrial Location and Environmental Protection Bureau on pollution regulations. Even so, the Montreal Protocol on Substances that Deplete the Ozone Layer was adopted in September 1987 by the United Nations Environment Programme (UNEP), a United Nations subsidiary body, and because Japan was a signatory to the Protocol, MITI and the Environment Ministry proceeded in 1988 to work on writing the necessary legislation. Thus the Law Concerning the Protection of the Ozone Layer through the Regulation of Specified Substances and Other Measures was established in May that year, and initiatives were launched to eliminate the use of CFCs.

### 4.2.2 Responses to Global Environmental Problems

MITI did not necessarily regard global environmental problems as a priority issue for policy until the latter 1980s, but in May 1990, the Regional Promotion and Environment Policy Subcommittee of the Industrial Structure Council's 1990s Policy Committee issued an interim report saying that the delays caused by waiting for clarification of the science would be harmful and because delay in such a matter could prove decisive, it urged both improved scientific understanding of the issues and the development of concrete measures to address them (Takeda 2011, p. 486).

MITI's position was that economic development needed to be balanced with global environmental conservation, and that industrial activities should be carefully regulated with due priority given to environmental policy. This approach, articulated in the MITI's "Earth Revitalization Plan," was adopted in the consultations on global environment conservation at the ministerial meeting one month after the above interim report.

Negotiations on the UN Framework Convention on Climate Change opened in May 1992, and along with agreeing to an international treaty on the control of emissions such as carbon dioxide, the UN Conference on Environment and Development (Earth Summit) was launched in Rio de Janeiro in June. In response to these developments, the Industrial Structure Council's Global Environment Committee prepared a report in May that cited the need for (1) efforts with a comprehensive point of view that addressed economic growth, energy, and environmental conservation as a trio of related issues, (2) acceleration of technological responses from a long-term view, and (3) promotion of international cooperation and related measures. In addition, the November Joint Meeting of the Industrial Structure Council, General Energy Research Committee, and Industrial Technology Council issued the report, "On future energy and environment measures." The report, with the subtitle, "Fourteen earth restoration proposals aimed at harmonizing environment, economics, and energy," confirmed the government's intent of treating economic growth, energy, and environmental protection together, and therefore stressed the need for technological breakthroughs; moreover, as this was by its nature uncertain, the report urged the importance of changing each individual person's lifestyle. The autonomy of business activities in environmental measures was also stressed.

Referring to the First Conference of the Parties (COP) held in 1995, Japan established the "Japan Program for Joint Implementation of the Framework Convention on Climate Change," and on the premise that the first projects based on the program would be certified by late March 1996, held repeated discussions among the ministries and agencies in the Ministry-Agency Liaison Meeting for Joint Implementation Activities. Based on the results of these meetings, it was decided that MITI would actively advance projects for joint implementation, with a special focus on the Asian region.

### 4.2.3 Responses to the Kyoto Conference

To formulate Japan's response to the Kyoto Protocol Climate Conference scheduled for 1997 (Takeda 2011, p. 503), the Global Environment Subcommittee of the Industrial Structure Council began in April 1996 to examine the issues involved in the Framework Convention on Climate Change. Its July "Issue Memo" pointed out the difficulty of fulfilling an international commitment to maintain per capita carbon dioxide emissions in the year 2000 at their 1990 level. According to the Memo, what was needed was (1) to strengthen the operation of the Law Concerning the Rational Use of Energy ("Energy Conservation Law"), (2) to follow up on the Vision for the Industrial Environment, and (3) to provide measures, technological development, and technical aid for developing nations directed at the years beyond the year-2000 target. The results of the examination of these issues and others were compiled in the 1997 *COP3 Kyoto Conference Guidelines*. Measures on energy conservation, new energy, and nuclear energy were strengthened, and the means most emphasized were those intended to stimulate the voluntary efforts of corporate enterprises. The Guidelines also pointed out the importance of recognizing that climate change is not just an environmental issue but an energy and economic issue as well, and that it is an issue that affects every individual.

COP3 took account of the demands of developing countries such that the agreement limited the mandatory cuts only to advanced nations. This was in part because of the severity of the conflicts of interest among the nations, but despite calls for caution from within the government, Prime Minister Hashimoto gave strong support to establishing the Kyoto Protocol, and the Prime Minister's Office took the lead in July 1997 to create a draft. Beginning in August, the government also organized the "Joint Meeting on the Relationship of Domestic Countermeasures to Global Warming Issues" to give ongoing consideration to the Protocol. At the Conference, a strong confrontation emerged between the Environment Agency and MITI on setting targets. Although MITI's proposal was deemed realistic, the proposal for standards was based on the government proposal, which prioritized the view of other participating countries. The report of the Joint Meeting pointed out that addressing global warming was a long-term task requiring efforts to reduce greenhouse gas over a period of 100 years or longer, and that the measures that were needed by 2010 included the use of new energy and nuclear power to help reduce CO<sub>2</sub> emissions, as well as energy conservation efforts on the demand side to meet the targets. The government attended the Kyoto Conference with these studies in hand and sought agreement on the Kyoto Protocol to the UN Framework Convention on Climate Change (Kyoto Protocol). The content of the agreement set targets for the reduction of six types of gases causing the greenhouse effect, requiring a reduction in emissions in the 2008–2012 period of at least 5% from 1990 levels—8% for the EU, 7% for the US, and 6% for Japan. The Industrial Structure Council's Global Environment Committee's views were evident in the setting of different targets for different countries, but compared with the views of the Joint Conference, and given the Committee's projections that even maintaining 1990 levels would be hard, these represented very stringent targets.

#### 4.2.4 Efforts Toward Achieving the Kyoto Protocol

On December 12, 1997, after the conclusion of the Kyoto Conference, MITI issued “On future measures regarding global warming” in the form of a Decision of the MITI Departmental Council (Takeda 2011, p. 515). It included revisions to the Energy Conservation Law, follow-up on Keidanren’s Voluntary Environmental Action Plan and supplementary measures, promoting the introduction of energy conservation technologies, and furthering the development and introduction of non-petroleum-based energy. In June 1998, the government formulated an “Outline on the promotion of measures to combat global warming,” which urged a series of domestic measures.

However, criticism gradually mounted in Japan against the Kyoto Protocol’s imposition of the cuts only on specific countries. The economic downturn that began in autumn 1997 strengthened business opposition to the requirements. Furthermore, the COP6 talks broke down in 2000 without producing actual results, and the US withdrew from the Kyoto Protocol in March 2001, making it hard to form consensus for its ratification even in Japan.

Keidanren had taken a cautious stance against an excessive strengthening of regulations, favoring a voluntary action plan for reducing greenhouse gas emissions. It stressed two points: first, that with the US withdrawal and the failure of diplomatic efforts to add developing countries to the framework, the treaty imposed an unfair burden, and the rush to ratify it was too hasty; and second, that measures imposed on the commercial sector were inadequate. METI (successor to MITI since 2001) accordingly reoriented its basic position to favor domestic measures with minimal impact on the economy. MITI/METI’s fundamental thinking was consistent in its emphasis on balancing the needs of the environment and the economy while imposing the burden fairly on both the industrial and the commercial sectors. Agreement on an international framework for the Kyoto Protocol was reached at Marrakesh in October 2001, and the Japanese government decided to ratify it in 2002, issuing a new Decision, “Outline on Promoting Measures on Global Warming,” in 2003.

Although METI adhered to its basic principles, it nevertheless shifted to the new framework in the 1990s. That is, while it hesitated to prioritize environmental conservation, which it saw as running counter to energy supply stability and sustainable economic development, it also tried to maximize voluntary action by companies and achieve the objectives where essential measures were concerned. The December 1994 Cabinet Decision on the Basic Environmental Plan (which was based on the Environmental Basic Law, to be discussed below) gave greatest stress to measures to promote consideration for the environment in corporate behavior. The envisioned measures were summarized in “Project to promote environmentally friendly corporate behavior,” which was an important pillar of environmental policy in the latter 1990s.

#### **4.2.5 Establishment of the Environmental Impact Assessment Law**

The following problems were later raised in the implementation process of the Environmental Impact Assessment Act that resulted from the Cabinet Decision of August 1984: (1) the environmental assessors lacked sufficient skills, (2) businesses also lacked the technical capabilities to evaluate the survey results, and (3) the methods were not yet established. As a result of these issues, calls mounted for legal support and for institutionalizing the participation of local residents (Takeda 2011, p. 381).

Making global environmental concerns a policy issue in the 1990s necessitated a review of the existing legal framework of the Environmental Pollution Prevention Law. At the request of Prime Minister Kiichi Miyazawa, a review was launched in March 1993 to establish the legal underpinnings for an era of global environment concerns. Business organizations such as Keidanren responded by deciding that business should undertake voluntary action rather than be subject to government regulation.

The Environmental Basic Law established in November 1993 said that in order to assure a healthy and cultured life for present and future citizens and to contribute to the welfare of humanity, it was the duty of every type of business to take the environment into account and to do so in every type of business activity. The Basic Environment Plan (December 1994 Cabinet Decision) made environmental impact assessment one of the fundamental measures for environmental conservation. Further, the June 1996 report of the Comprehensive Study Group on Environmental Impact Assessment (composed of the ministries and agencies concerned) called for legislation on the environmental impact assessment law. MITI took the stance that there was little need for legislation on power generation plants; industry did not raise much objection, because factories fell outside the scope of the new law, and because there was little anticipation of the large-scale factory sites that would later become targets of the law.

The general principle of environmental impact assessment was deemed applicable to power plants, and the revision of the Electric Utility Industry Law addressed special procedures that distinguished power plants from other enterprises. With the June 1997 Environmental Impact Assessment Law and Partial Revision of the Electric Utility Industry Law, assessments of power plants, previously carried out by Ministry Decision, became subject to legal procedure.

#### **4.2.6 Full-Scale Development of Recycling Policy**

In early-1990s responses to illegal dumping, existing waste regulation emphasized the issue of disposal but lacked ways to curb waste generation itself. Once it was understood that the distinction between non-industrial and industrial waste no longer conformed to actual conditions of disposal, the need to address the problem became clear (Takeda 2011, p. 421). In August 1990, MITI created the Recycling Promotion Office and established a Committee on Waste Disposal and Resource Recycling within the Industrial Structure Council. The Committee issued a report in December 1990 titled “On future waste disposal and resource recycling measures” that

laid out the direction for a number of measures for implementing waste reduction, resource recycling, and ease of processing in production, distribution, and consumption processes. Especially significant was its emphasis on the effectiveness of issuing concrete guidelines on waste products, by type, to businesses. The report envisioned a shift to an economic society that would naturally absorb resource conservation and reuse.

Based on this report, the Law for the Promotion of Utilization of Recycled Resources (“Recycling Law”) was adopted in April 1991. The Law (1) stipulated that the appropriate minister was to formulate and announce basic policy for the comprehensive promotion of the use of recycled resources; (2) determined the general responsibilities of business operators, consumers, and national and local public bodies; (3) stated that recommendations would be made to businesses and dealers in industries and products specified by the government, with the aim of promoting the use of recycled resources as raw materials. In this way the bill on recycling raw materials, first conceived in the mid-1970s, was realized after more than 15 years through legal measures to encourage voluntary efforts by businesses in accordance with established guidelines.

Prior to the implementation of the Recycling Law, the Environmental Policy Division of the Industrial Location and Environmental Protection Bureau designated target industries and products and formulated and announced its basic policy on them. In September 1992, the Industrial Structure Council Waste Disposal and Recycling Subcommittee conducted a comprehensive inspection of the progress being made and urged the addition of further target areas. The Committee again studied the progress of the policy in 1993 and issued recommendations in July 1994. These investigations found that the Recycling Law and the June 1993 Law on Temporary Measures to Promote Business Activities for the Rational Use of Energy and the Utilization of Recycled Resources had achieved certain results in the use of recycled resources, but also pointed out the following issues: that waste emissions were not showing any remarkable decline, that existing disposal capacity was nearing its limit, and that the costs of disposal in general were increasing year by year. The Committee proposed a significant expansion of usage-based processing fees and of municipal sorting systems for waste, and also urged that consumers and businesses cooperate with the separation and collection of waste by municipalities and used-paper collectors. MITI added target areas and revised its guidelines in April 1996.

Through the above measures, the glass bottle and can recycling rates increased from immediately after the laws’ establishment, and recycling of used paper increased from the latter 1990s on. The administrative effort to promote the municipal collection and recycling of separated items contributed greatly to these outcomes.

#### **4.2.7 Reorganization of the Environmental Protection and Industrial Location Bureau and Promotion of Recycling**

In July 1993, MITI reorganized the Industrial Location and Pollution Bureau into the Environmental Protection and Industrial Location Bureau (Takeda 2011, p. 441). This

meant that industrial pollution issues came to be considered within the framework for environmental measures, and the Environmental Protection and Industrial Location Bureau thereafter advanced policies on recycling industrial waste into raw materials.

The first step was taken with the establishment of the Law for the Promotion of Sorted Collection and Recycling of Containers and Packaging in June 1995, which promoted the sorted recycling and repurposing of bottles, cans, paper, and plastic containers and packaging. The appropriate minister was to prepare and publish basic recycling policies and plans, which would take specific form in municipal and prefectural plans for sorted collection. At the same time, it became mandatory for those disposing of containers and packaging to properly sort and dispose of them and to meet set volumes for the recycling of particular types of containers. Businesses were permitted to pass the cost burden on to consumers and to use public relations efforts to seek consumers' understanding of the higher prices. The aim of this law was to change people's outlook on waste, so that waste would be curtailed and reuse maximized at each stage—product development, manufacturing, and consumption. The ultimate aim was to build economic and social systems based on recycling and on reduced environmental impact. Beginning with glass bottles and PET bottles in April 1997, items slated for recycling were added as needed. As a result of the Container Recycling Law, the volume of glass bottles in landfill was reduced by 55% as of FY 1999.

While the containers and packaging issue showed progress, recycling measures for cars, household appliances, and other such products were carried forward into the late 1990s. The disposal of cars had previously rested on buy-back payments but the cost burden was now shifted to the person disposing of the car. But new problems were emerging, such as the securing of landfill disposal sites and reducing the amount of shredder dust, which was hard to process. The Industrial Structure Council's Waste Disposal and Raw Materials Recycling Committee therefore launched studies in October 1995, and with the revision of the Recycling Law in 2000, automakers were called upon not only to reduce (reduce raw materials; increase longevity) and reuse, but also to absorb recycling into the manufacturing stage itself. The Central Environment Council's March 2002 report called for legislation, and METI and the Ministry of the Environment (successor of the Environment Agency since 2001) took up the task of creating that legislation. July saw the promulgation of the Law for the Recycling of End-of-Life Vehicles, which (1) determined the division of roles of the stakeholders, and (2) made car owners responsible for the cost of recycling. Additionally, the June 1998 Law for the Recycling of Specified Kinds of Home Appliances required manufacturers to take back and recycle their products and retailers to receive and pass them on, and for consumers to cooperate by bearing the cost burden of collecting and recycling the used products (Table 6).

While these efforts produced results for a specified period, their limits were also becoming clear. In particular, used paper, for which recycling had been instituted especially early, was designated under the Recycling Law, and its target reuse rate was raised to 55% by FY 1994, but the target was not met. At MITI's request, The Japan Papermaking Association established a new target of 56% by FY 2000, and met that goal by FY 1999, but this constituted an improvement in recycling rates of no more than 1%.

**Table 6** Advances in recycling (%)

Year	Old paper		Recyclable packaging	Glass	Steel cans	Aluminium cans	PET bottles		Styrofoam	
	Recovery rate	Utilization ratio					Recovery rate	A	B	
1990					44.8					
1991					50.1				12.6	
1992	52.5	51			56.8					
1993	53	51.2			61					
1994	53.3	51.7	19.9	55.6	69.8	61.1				
1995	53.4	51.5		61.3	73.8	65.7			27.3	
1996	53.6	51.3	22.7	65	77.3	70.2			28.7	
1997	54	53		67.4	79.6	72.6	9.8		30.2	
1998	54.9	55.2	25.1	73.9	82.5	74.4	16.9		31.2	51.5
1999	56.1	55.7		78.6	82.9	78.5	22.8		33.2	55
2000	57	57.7	28.8	77.8	84.2	80.6	34.5		35	58
2001	61.5	58	30.2	82	85.2	82.8	40.1		37.8	60.1
2002	65.4	59.6	31.1	83.3	86.1	83.1	45.6		39.1	64.7
2003	66.1	60.2	34.3	90.3	87.5	81.8	48.5		39.3	65.6
2004	68.5	60.4		90.7	87.1	86.1	46.4		41	69.3

Based on METI, Sangyo Gijyutsu Kankyo-kyoku 2005.

Recyclable packaging, Steel cans, and Aluminium cans: recycling rate; Glass: cullet utilization rate; Styrofoam A: material recycling rate; Styrofoam B: recycling rate including thermal recycling rate.

Source Takeda (2011, p. 441)

In January 1997, the Waste Disposal and Resource Recycling Committee issued a report titled “On future measures for industrial waste products”; because of the context of constraints on final disposal sites, the stalling of reductions and recycling, and the problem of illegal dumping, it proposed shifting to a “recycling-oriented economic system” in many major industries, involving numerical targets for the reduction and recycling of industrial waste and strengthening the waste producer’s responsibility for proper disposal.

This line of thinking, and that in the July 1999 report of the Joint Subcommittee on Basic Problems (of the Waste Products and Recycling Committee in the Global Environment Committee of the Industrial Structure Council), made clear the urgency of establishing a “recycling-oriented economic system” that called for maximizing energy efficiency, and strengthening the partnership between enterprise, consumer, and administration. The result was the June 2000 Basic Law for Establishing a Recycling-Based Society as well as a Recycling Law for raw materials needed in construction and for food products. The Basic Law, aimed at forming a “recycling-oriented society,” regarded all target products as “waste” products regardless of whether they had value or not, and it aimed to curb waste disposal and focus on the potential usefulness of waste products as recyclable resources.

#### **4.2.8 Responding to Minamata Disease**

In March 1973, the Kumamoto District Court ordered Chisso Corporation to pay compensation to Minamata Disease victims. This caused an immediate threat to Chisso’s commercial survival. The government’s response, seen in the June 1978 Cabinet Agreement titled “On Minamata Disease Countermeasures,” was to maintain financial support until a fundamental review to be undertaken in 1999. Kumamoto Prefecture issued prefectural bonds in order to assist Chisso with the financing needed for the required compensation. This approach aimed to maintain the polluter pays, principle while at the same time ensuring, by maintaining and strengthening Chisso’s ability to operate, that the payments themselves would not be impeded. For the same reason, the Japan Development Bank offered capital investment financing for a Chisso subsidiary beginning in 1981, while in 1994 other measures were taken to mitigate Chisso’s interest burden and to establish a fund for promoting the revitalization of the Minamata–Ashikita region (Yamazaki 2011, p. 144). Despite these measures, however, Chisso’s accumulated debt including the prefectural bonds exceeded 200 billion yen in 1999, and it became obvious that repayment was no longer possible. With a Cabinet Decision in February 2002, the framework decided upon in 1978 was changed to partially exempt Chisso from repayment of both the government’s subsidies and its debts to financial institutions.

### 4.2.9 Safety Management for Chemical Substances

Safety management for chemical substances shifted toward deregulation from the 1990s forward (Yamazaki 2011, p. 485). The October 1973 Law Concerning the Examination and Regulation of Manufacture of Chemical Substances (Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture) stipulated, first, that all new chemical substances, other than those publicly pronounced safe according to existing chemical rosters or examination procedures, must obtain a government determination of its safeness before being manufactured or imported; and second, that chemical substances that do not readily decompose but tend to accumulate and are toxic when absorbed over the long-term would be specifically designated by Cabinet Order and subject to regulations stipulated in the law. The former stipulation represented the first attempt to introduce the preliminary reviews that subsequently became the common approach to global chemical safety management. In May 1986, the regulation was strengthened with enhancements to the preliminary examination system and an expansion of the range of specified chemical substances. At the same time, categories were established for designated chemical substances and second-class specified chemical substances, and a post hoc management system was put in place.

With the UN in the lead, attempts were made in the 1990s to deploy on a global scale the chemical substance control efforts made in advanced economies. Agenda 21, adopted at the Rio de Janeiro Earth Summit (UN Conference on Environment and Development) in June 1992, called for adequate management of hazardous chemicals and a wide range of measures to be achieved by the year 2000. Meanwhile, the Japan Chemical Industry Association (JCIA) adopted the “Basic policy of the Japan Chemical Industry Association on environment and safety” in 1990 and began to develop projects for the voluntary management of chemical substances. Policies governing projects up to the year 2000 were compiled in March 1994, including the standards and guidelines needed for implementing “responsible care.” Where the conventional approach to safety management required compliance with certain regulations, this sought the voluntary control of the impacts on the environment and on people across the entire life cycle of the substances, including their production, consumption, and disposal.

With the mounting pressure for safety management from global efforts and the exploration of voluntary action by industry, the Japanese government began to recognize the limits of administrative responses. When the Chemical Substance Control Law was first established, only about 700 new chemical substances needed annual evaluation, but by 1988, the number had grown to 5,000, and by 1989, to over 6,000. The load exceeded administrative capacity, and MITI concluded that self-management and the principle of responsibility would be an appropriate supplement to legal and regulatory measures for risk management. The February 1996 Interim Report of the Safety Measures Committee of the Chemicals Council (titled “The promotion of comprehensive safety management for chemical substances”) suggested the importance of voluntary management, and the July 1999 Act on Confirmation of

Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof also promoted not only regulation but also improved voluntary control by businesses. Specifically, it introduced the Pollutant Release and Transfer Register system and required reports on capturing the quantity of emissions and submission of an Material Safety Data Sheet (MSDS) with contents, properties, handling and other data pertaining to designated chemical substances. It was also the responsibility of business operators to follow to the chemical substance management guidelines formulated by the government, to manage the manufacture, use, and other handling of designated chemical substances, and also to work to deepen local residents' understanding of how chemical substances were managed within business operations. Based on this framework, methods were adopted to encourage businesses to undertake voluntary management.

### ***4.3 Industrial Location Policy and Promotion of Regions***

#### **4.3.1 Reconsidering Industrial Location Policy**

In May 1990, the Regional Promotion and Environment Policy Subcommittee of the Industrial Structure Council's 1990s Policy Subcommittee compiled an interim report on regional promotion and global environmental policy for the 1990s (Takeda 2011, p. 193). The report pointed out land issues, including the accelerating concentration of population and functions in Tokyo and the corollary of skyrocketing land prices, and the declining population and vitality of rural areas. These issues were the basis for the direction recommended by the report for industrial location policies in the twenty-first century, which stressed the need to (1) construct policies centered on people, (2) rebuild social frameworks, and (3) develop comprehensive, long-term, and consistent policies.

The report cited the need (1) to foster major regional centers and regional city centers and promote links among them, and (2) to strengthen administrative functions to promote regional coordination across prefectural boundaries so as to enable regional formulations with a broader perspective. But it also represented an extension of existing policy inasmuch as it once again presented the same issues in regional development.

This policy stance reflected a growing concern in the 1990s about the hollowing out of industry, when the imminent decline of factory sites forced a review of the issues. This was because, although industrial compounds had been built as planned, municipalities were left with unsold parcels of land and the heated competition to attract projects resulted in the burden of enormous subsidies.

It was in this context that the Law On Temporary Measures for Activation of Specific Regional Industrial Agglomerations was established in 1997 to address the hollowing out of industry. Its purpose was to build on the Law on Temporary Measures to Revitalize Designated Clusters of Small and Medium-Sized Enterprises ("Clusters Revitalization Act," May 1992). It also treated regional industrial clusters, which had

become the foundation of *monozukuri*, as “clusters of basic technology industries,” and both of them as “specially designated industrial clusters” and therefore targets for revitalization. To this end, measures were put in place to support small and medium-sized regional enterprises moving into designated fields by (1) upgrading the technology of designated businesses in the basic technology industries, and (2) enabling the revitalization of specially designated industrial clusters.

MITI had put off planning nationwide location policies to accompany the regional designations until the final 1992 Law for the Comprehensive Development of Regional Core Cities with Relocation of Office–Work Functions. In 1995, the New Industry Location Study Group, a private advisory body of the Environmental Affairs Bureau, compiled a “Report of the new Industry Location Policy Study Group: Toward enhancing attractive industrial location environments in the global economy” that laid out the direction of the new policy. The report raised the issue of changes in the form of advancing globalization, upgraded industrial structures, changing values and social environment issues in metropolitan areas, and regional urbanization. The most important point stressed here was the need to rectify the various regulations and practices that restricted potential industrial sites and to ensure greater freedom for business development.

In response to this recommendation, the interim report compiled by the Industrial Structure Council’s Industrial Location Subcommittee in May 1997 emphasized the need to ease the regulations that prevented companies from locating in metropolitan areas, which led to a review of the Factory Location Law (Table 7).

Industrial location policy thus changed significantly. The prior Technopolis Law and Key Facilities Siting Law that had underpinned regional designations were replaced by the Law for Facilitating the Creation of New Business. As the new law’s name suggests, these policies emphasized business creation rather than industrial location policy. Policy changes advanced even further with the 2001 abolition of the system of New Industrial Cities and Special Areas for Industrial Consolidation that had been promoted ever since the 1960s and with the lapsing of the Law on Extraordinary Measures for the Development of Coal Mining Areas. This meant the end of an industrial location policy under which the government designated certain regions and offered incentives to attract businesses to them, and a shift to regional development spearheaded by the regions themselves.

#### **4.3.2 Advances into New Sectors for Small And Medium-Sized Enterprises and Regional Promotion**

This shift in location policy was in keeping with the trajectory of change in MITI policies on small and medium-sized enterprises, which were considered key players in regional industrial development. Regarding post-bubble support for SME moves into new business sectors, the September 1993 Ministerial Conference on Economic Measures decided, as part of its emergency economic countermeasures, to “support small and medium-sized enterprises’ restructuring efforts, such as entering new fields

Table 7 Progress in the new industrial relocation plan

	New Plan, 1985–2000			(cf) Old plan, 1976–1985	
	Goal	Present status	Results	Goal	Results
Item	2000	1998	2000	1985	1985
Economic frame	Medium growth driven by domestic demand			5.7%–6.3%	4.30%
(Economic growth rate)	Annual rate 4.0%	3.20%	2.70%		
Industry shipment values classified by Industrial Relocation Promotion Law in cases where the goal was met, as a share of national values	11%	13%	11.60%	11%	18%
Relocation promotion region					
Non-zoned area	54%	52%	53.30%	59%	55%
Induction area	35%	35%	35.20%	30%	27%
Pacific belt region	58%	61%	59.60%	60%	66%
Goal for factory relocation	Area of industrial sites in relocation promotion districts 20% lower in 2000 than in 1985	16%	21.80%	1985 area of factory sites in relocation promotion districts down 30% from 1974	15%
New expansion targets in relocation promotion	About 3/4 of cumulative new expansion nationally from 1986 to 2000 was in induction areas	Single year 62% Cumulative 77%	Single year 75.60% Cumulative 77.10%	About 70% of cumulative new expansion nationally between 1976 and 1985 was in induction areas	67%
Area of factory sites where targets were met	175,000 ha	176,000 ha	168,000 ha	215,000–225,000 ha	160,000 ha

Source Takeda (2011, p. 48)

Original data from: (report) Japan Industrial Location Center (2001, p. 33); Shūgiin Chōsa Kyōku Keizai Sangyō Chōsa-shitsu (2006), *Kogyo saihatchi sokushinho wo haishi suru hoken an no yoten oyobi mondaiten*, results for the year 2000

and developing overseas markets, so that SMEs can remain vital while overcoming [the challenges of] structural changes in the Japanese economy.” It was on this basis that the Temporary Law Concerning Measures for Smooth Adaptation to Structural Changes in Economy by Advancement of Specific Small and Medium-Sized Enterprises to New Fields (“New Fields Law”) was established in November (Nakata 2013, p. 323). As the Ministerial Conference showed, the new law discarded the earlier feature of seeking to facilitate business conversions that were either unavoidable or urgent, and instead sought to “develop SME vitality in keeping with the new economic environment” through business conversions to meet changes in the economic structure. The new policies (1) treated expansion into new business sectors as “something that should be actively supported and advanced,” (2) dramatically expanded the range of industries targeted by this policy, (3) gave support to expansion overseas, and (4) enabled SMEs that did not yet belong to the “designated industries” and individuals not yet running businesses to become eligible for support upon entry into those industries. Four industries were designated under the New Fields Law in November 1993: manufacturing, printing, software, and information management services. The number of approvals for expansion into new fields at the end of 1995 was 1,028 for manufacturing and 93 for software; 219 plans were approved for expansion overseas and 11 for opening new businesses, for a total of 1,338. However, the use of support policies in the form of loans and special tax exemptions remained at a low level.

Because the Law on Temporary Measures for Small and Medium-Sized Enterprises in Specified Areas would expire in February 1993, a Law on Temporary Measures for the Revitalization of Specified SME Clusters (“Cluster Revitalization Law”) was established in May 1992. Its aim was “to strengthen the foundations of autonomous development of regional SMEs through measures to promote the revitalization of designated SME clusters, thereby contributing to the balanced development of the national economy.” Its significance lay in its stress on clusters. That is, the SME Modernization Council’s discussions of the Cluster Revitalization Law said that the significance of clustering SMEs lay in efficiencies in promoting joint operations, shifts to higher value-added production, and the development of new fields, and that the clusters would serve as nuclei for regional economies and society. Furthermore, the maintenance and development of these functions were themselves the concern of the entire country.

Under the framework of the law, the MITI Minister would issue revitalization guidelines according to which the prefectures were to prepare implementation plans with concrete designated areas, business goals, support project details, and other aspects for each approved SME cluster. SMEs intending to enter a specific field within an industry designated in the revitalization plan could prepare their plans for entry and submit applications to the prefectural governor. Commercial and industrial associations could also submit plans in the same way. Plans that were approved by the governor would be eligible for support measures. This meant that there were two routes of entry—by the businesses themselves and through the commercial and industrial associations.

Due to rapid globalization, however, the Cluster Revitalization Law proved to have a limited role. Although it was originally set to expire in ten years, it was abolished after just three years, in 1997. This was because a new legal framework was needed.

The New Cluster Revitalization Law was enacted in 1997 (Nakata 2013, p. 863) because of great concern about the destruction of basic technology industry clusters and production regions due to hollowing out. The new law aimed to promote vitality in regional industrial clusters by establishing new industrial infrastructure and upgrading the R&D environment. It was intended to extend the Cluster concept and also to provide support measures similar to those given designated SMEs by the Cluster Revitalization Act. The basic technology industry cluster was envisioned as a cluster district for machine industries, such as that in Tokyo's Ota Ward. The "Basic Technology Industry Cluster Revitalization Plans" were formulated in 25 regions around the country based on the new law, and by FY 2005, a total of 473 "Advanced Plans" and "Improvement Facilitation Plans" had received approval. "Specific Small Business Cluster Revitalization Plans" were also formulated in 118 areas nationwide for a cumulative total of 715 "Advancement Plans" and "Entry Facilitation Plans" approved between FY 1997 and FY 2005. MITI's December 2006 ex-post facto evaluation of the promotion of regional industrial cluster revitalization measures found that although certain results had been achieved, regional economic measures needed to apply more closely to the economic environment of the region itself. Thus the hollowing out problem had not necessarily been resolved.

The 1995 Temporary Law Concerning Measures for the Promotion of the Creative Business Activities of SMEs ("Creative SME Law") was a chance to develop new kinds of SME policies including the December 1998 Law for Facilitating the Creation of New Business ("New Business Creation Law"), which aimed to promote the development of new businesses and new products and services, as well as the Law on Supporting Business Innovation of SMEs ("Business Innovation Law"), which sought to develop policies for promoting innovation in the regions. These three laws were absorbed with the prior two into the Enterprise Innovation Law in 2005, the name of which was changed to the Law for Facilitating New Business Activities of Small and Medium-Sized Enterprises.

In order to respond to the hollowing out of some industries and the maturation of others, it was important for the Creative SME Law to work boldly on new fields based on original and superior technologies and to create new markets and develop them. The Law assumed that SMEs with a flexible and entrepreneurial spirit would play this role (Nakata 2013, p. 243). The need for policies to be implemented in a coherent manner and to be consistent with the life-stage of the SME formed the background for the enactment of the Creation Law based on the December 1994 report of the SME Modernization Council. The law was given a 10-year period.

The law aimed to "promote creative business activities of SMEs by supporting and promoting their R&D and thereby opening up new fields of business, to facilitate the transformation of Japan's industrial structure and the sound development of the people's lives" (Article 1). "Creative business activities" were understood as "aggressive efforts to develop new products and new services based on the creative

ingenuity of SMEs and to develop new markets themselves.” The targets for assistance were (1) SMEs, (2) incorporated associations in which two-thirds or more of the members were SMEs, and (3) individuals not yet engaged in business but expecting to found businesses in the future. Approved R&D plans would be eligible for capital investment tax cuts, as well as various specific support measures under the Small and Medium-sized Enterprise Investment Business Corporation Act and the Small and Medium-sized Enterprise Credit Insurance Act.

According to the results and evaluations compiled by the SME Agency in October 2004, the number of accredited R&D plans under the Creation Act was 10,734 at the end of July 2004, of which 36% were R&D-type SMEs. The greatest number was in Kanto (52.3%) and Kinki (17.0%), and 59.8% were in manufacturing and 25.4% in service industries. A survey commissioned in 2003 found that 40.3% of the plans that received approval had already been commercialized, 20.6% were in the process of developing the market, 16.4% were in the R&D phase, and 15.2% had been suspended or cancelled. This was considered a high rate of commercialization.

### 4.3.3 New Business Creation Law and Business Innovation Law

The New Business Creation Law materialized as part of the “emergency economic measures” decided by the Cabinet in November 1998 (Nakata 2013, p. 646). Its purpose was “to utilize our country’s industrial resources, including human resources, and to promote the establishment of new industries and creation of new products and provision of new services, to improve business methods, and so on. In addition to giving direct support to new businesses established by individuals and companies, measures would also be taken to promote business activities using the new technologies of SMEs in addition to effectively utilizing local industrial resources, and by thus encouraging the autonomous development of regional industries, thereby establishing a vital economic society” (Article 1).

The support would take three forms: (1) support for creating new industries, (2) implementation of a Japanese version of Small Business Innovation Research (SBIR) in order to raise the technological level of SMEs, and (3) formulation of regional platforms. The targets of the support would be projects newly launched by individuals, company projects newly launched by individuals, and company projects newly launched by companies, with each version receiving support such as the designated SME Enterprise Credit Insurance. The New Business Creation Law was revised three times, of which the December 1999 revision added provisions for “New Business Development Sectors.”

According to results compiled by the Small and Medium-Sized Enterprise Agency, 246 plans had been approved as of July 1, 2004, under the new designation of “new business development fields.” This was regarded as a good result.

“Support for innovative SMEs” had formed part of the emergency measures that followed on the 1997 financial crisis, and the Business Innovation Law was established in that context, with SMEs as its target. The Law regarded business innovation as “the development or production of new products, the development or provision

of new services, and the introduction of new methods of producing goods or selling them,” and did not stipulate that the support would go only to certain industry designations, or industry associations or organizations, but instead required of individual companies that they provide numerical targets. Furthermore, it aimed not only at “business innovation” but also at “strengthening the foundations of business.” If a plan was approved, financial support and special tax measures became available. According to a survey by the Small and Medium-Sized Enterprise Agency, the number of approvals reached 14,774 between July 1999 and July 2004. Kanto accounted for 38.0% of these, and Kinki for 17.5%, meaning about 50% between the two regions. Manufacturing industries accounted for almost half the approvals, at 48.5%. Although the business innovation support plan set its indicator of success at 3% or more annual increase in added value, only 35.7% of the approved companies met this target. Nevertheless, since the value-added rate achieved by the target companies was high compared with non-target companies, the outcome was considered positive.

#### **4.3.4 Measures to Address Pit and Wastewater Mine Pollution**

New systemic problems were revealed in the measures taken against mine pollution. Since no particular technology had been found to enable the complete disposal of mining waste, the cost burden of processing waste caused by earlier developers became a drag on mining operations, which also faced problems with the capital financing system (Takeda 2011 p. 647).

In March 1992, the mining industry called for an expansion and strengthening of subsidies and funds to prevent pollution from abandoned mines. In February the Mining Industry Council had pointed out the need to address the problem of permanent mine drainage treatment and the fact that the funds of those responsible were not fully secure. MITI began revising the Act on Special Measures for Pollution Caused by the Metal Mining Industry, which was passed in May and implemented in November. The main points in the amended Act were that the financial resources for permanent mine wastewater treatment could be secured by establishing a fund on the polluter-pays principle and that a system for implementing reliable and permanent mine wastewater treatment could be established through designated institutions. A mine pollution control fund was accordingly established on the following basis: (1) the MITI Minister would designate a mine pollution control organization responsible for running the fund, (2) the Metal Mining Agency of Japan (MMAJ) would pay the cost of pollution prevention from the fund’s profits on investment, and (3) to the extent that the organization designated by the MITI Minister was engaged in mine pollution control, those companies with mining rights that were implementing prevention operations would be released from the pollution prevention obligation. The basic plan was revised in March 1993 based on the revised Law, and new policies were developed accordingly.

On coal mining pollution measures, the legal framework consisted of the August 1952 Extraordinary Law on Coal Mine Damage Recovery, the June 1963 Act on Temporary Measures Concerning Compensation for Coal Mine Damage, which aimed

to ensure the smooth delivery of compensation in pollution cases, and the Two Basic Laws on Mining Pollution. These laws were given repeated 10-year extensions after 1972. However, with the June 1991 report of the Coal Mining Council, beginning in 1992, the aim shifted to promoting measures to counter mine pollution, in tandem with the structural adjustment of the coal industry. The aim also was for the complete elimination of accumulated damage from mining by the end of FY 2001, or in other words, within the coal mining structural adjustment period. The measures were reworked in December 1992 based on long-term plans for recovery from mining damage, and as a result, the elimination of accumulated mine pollution was announced successively in 1993 in Iwate, Aichi, and Gifu Prefectures. With the report of the Coal Mining Council in July 1999, additional measures were taken including the abolition of related laws and regulations under the expectation that the measures would be brought to completion at the end of FY 2001.

## ***4.4 Harmonizing Energy Development and the Environment***

### **4.4.1 Comprehensive Development of Energy Policy**

From 1989 forward, the environment began to emerge as a policy issue alongside energy security and the economy. Triggering this development was the June 1989 report titled “Toward harmonization of the economy, energy, and the environment on a global level” compiled by the Roundtable on Long-term Energy Issues from a Global Perspective, a private council under the Director-General of the Agency of Natural Resources and Energy (Kikkawa 2011, p. 82).

The report held that the measures adopted by America, the Soviet Union, and China, all of which were high-CO<sub>2</sub> emissions nations, were inadequate and also pointed out the need to support and cooperate with the other advanced nations with respect to measures in developing countries, where energy demand was expected to increase. Proceeding with these would require (1) energy conservation, (2) fuel selection, and (3) CO<sub>2</sub> immobilization, which meant that a heavy emphasis needed to be placed on technological development.

In June 1990, the Coordination Subcommittee of the Advisory Committee for Energy compiled “The challenges of new trends in global energy.” The report had three notable features. First, it called for developing energy policies on a global scale. Second, it gave new meaning to raising utilization rates through systematization, by making it part of energy conservation policy. This was the idea of raising efficiency rates by extending the target of policy to include the entire energy system from the supply stage through the final user stage, and even to the social system itself. The aim was a conceptual change from “energy conservation meaning savings or reduced use” to “energy conservation as compatible with affluence.” Third, regarding the selection of energy sources, the report highlighted the idea of an energy mix, urged avoiding excessive dependence on any particular source of energy and for appropriate combinations of all kinds of energy, while at the same time maintained that these

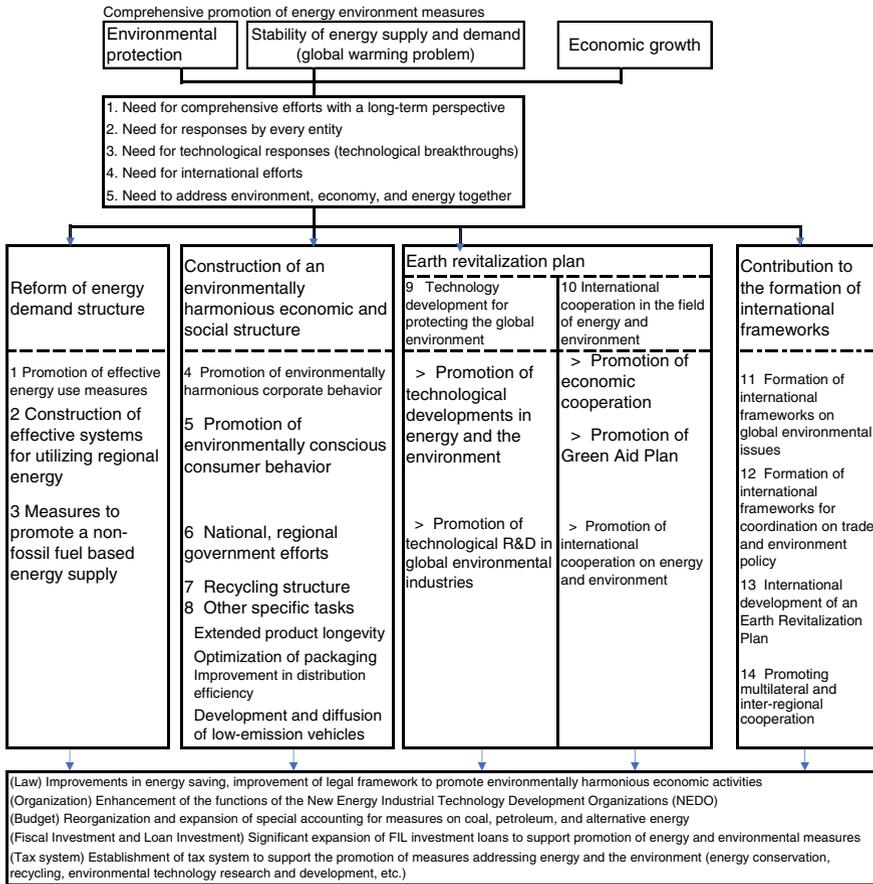
approaches be advanced while taking the environment into account. Looking ahead to the June Earth Summit in Rio de Janeiro, in April 1992 the Japanese government began to take on global environmental issues more systematically. In this way, the three E's became the basis of energy policy.

The economy once again took center stage in the 1990s. In December 1993, the Fundamental Policies Subcommittee of the Comprehensive Energy Research Committee produced an interim report entitled "Aiming for a strong and flexible energy supply system" (Kikkawa 2011, p. 92). The report promoted the liberalization of the electric power and gas businesses, pointing out the need for (1) measures to stabilize energy supply and demand and (2) a review of the regulations concerning the energy supply system and the importance of introducing market principles to it. Meanwhile, a more concerted emphasis was placed on the environment. Especially after about 1997, with the COP3 Kyoto Conference just ahead, the tone of policy showed increased consideration for global environmental problems. The Law Concerning Promotion of the Use of New Energy ("New Energy Law") was announced in April 1997, stipulating systematization based on the need to assure energy security and the growing need to respond to the issue of global warming. The focus was on accelerating the introduction of new energy that was ready for practical applications but that had not yet progressed due, for example, to economic limitations. The targets of this thinking were solar, wind, and waste power generation, as well as clean-energy vehicles. The Special Measures Law Concerning the Use of New Forms of Energy by the Electric Power Industry ("Renewable Portfolio Standard [PRS] Law") was passed in June 2002 and came into effect the following April. This required that a fixed ratio of the electricity bought by retailers had to be new energy. Targets of the policy included wind, solar, geothermal, small and medium hydraulic, and biomass power. In this way, Japan's policy on new energy in the early 2000s strengthened the drive to promote recyclable energy use from the points of view of both the environment and energy security (Fig. 4).

Entering the twenty-first century, further emphasis was placed on simultaneously achieving the three E's. The Energy Research Commission's Coordination Subcommittee and Energy Supply and Demand Subcommittee issued a joint report in July 2001 titled "On future energy policy," which pointed out the stringency of the goal and the need for the citizenry as a whole to take on the effort and burden required to meet that goal. The Basic Law on Energy Policy, promulgated and enforced in June 2002, carried on with this approach. Based on the provisions of Article 24, paragraph 4 of the same law, the Basic Energy Plan presented in October 2003 clarified the goals of securing a stable supply of energy, adapting to the environment, and utilizing market principles.

#### **4.4.2 Promotion of Deregulation: Petroleum and Natural Gas Policy**

The first deregulation in the energy policy field was developed from 1987 to 1993. The trigger was the report titled "On the petroleum industry and petroleum policy in the 1990s," which was compiled in June 1987 by the Committee to Review the



**Fig. 4** Harmonizing energy development and the environment in the 1990s. *Source* Minami Ryo, “Tsusho sangyo sho no kankyo taisaku” *Jurist* 1015. 1993, p. 19. [II-5, p. 520]

Basic Issues of the Petroleum Industry that had been newly established under the Petroleum Council’s Petroleum Subcommittee in November 1986 (Kikkawa 2011, p. 121). It led to revision of the restrictions on refining and sales activities that had been imposed by the Petroleum Industry and Gasoline Retail Business Laws. The move to deregulation proceeded without interruption, and with the mid-1990s call for stabilization and greater efficiency in the supply of petroleum products, the principle of competition was introduced in the import sector as well.

Further review was promoted from 1997 onwards, in what might be called a second stage of deregulation. Based on recommendations made in 1993 by the Economic Reform Study Group, which was charged with considering deregulation, the Petroleum Council in December 1994 compiled a report titled “On future ways to supply petroleum products.” The Law on Establishing Related Laws to Secure a Stable and Efficient Supply of Petroleum Products was passed in April 1995, as

part of the abolition of the Provisional Measures Law on the Importation of Specific Petroleum Refined Products (“Specific Petroleum Law”). The Volatile Oil Sales Law was also revised to become the Act on the Quality Control of Gasoline and Other Fuels.

Thereafter, the Petroleum Council continued to consider deregulation measures, revising the petroleum products export approval system in 1997 and abolishing the service station supplier certification system. In December 2001, the Petroleum Business Law was abolished, which marked the complete liberalization of the oil industry.

Liberalization generated entry into petroleum import and service station businesses. The price system, under which gasoline was the only high-priced petroleum product, was corrected. The result was the deterioration of operator earnings, and in particular a decline in the gross margin on regular gasoline, which led to a decrease in the number of gas stations after 1995.

The Gulf crisis of 1991 led to a reexamination of stockpiling policy, and the June 1992 suggestion by the LPG Subcommittee of the Petroleum Council’s Petroleum Committee that a national LPG stockpile be introduced. The decision was made to establish a 1.5-million ton stockpile by FY 2010 (about one month’s worth of annual imports) (Kikkawa 2011, p. 194). In the latter 1990s, market-based responses to stockpiling came under consideration. The Petroleum Council’s Subcommittee on Petroleum Stockpiling and Emergency Measures issued a report in August 1999 titled “Basic thinking on future emergency responses,” which highlighted five points: (1) maximum maintenance and utilization of market functions; (2) emergency responses based on limits to market functions; (3) improvement of the information infrastructure so that the ability to respond to emergency conditions would become part of regular operations; (4) ideal approaches to releasing and holding petroleum stockpiles; and (5) international cooperation. This meant revisiting the question of how to handle stockpiles and included in its scope the reevaluation and active utilization of the cooperative exchange functions of the International Energy Agency (IEA). However, due to the emphasis on Energy Security after the 2000s, the environment was not one in which the report’s recommendations could immediately be realized.

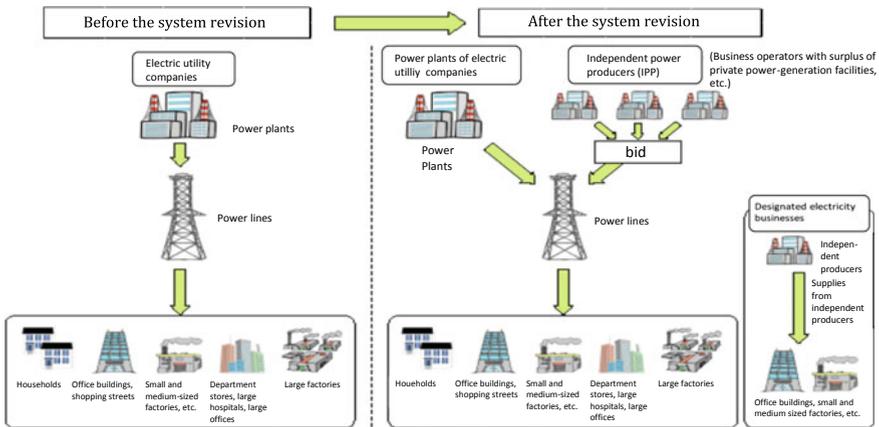
Regarding coal policy, the Eighth Coal Policy covering 1986–1991 had concluded that an annual production of about 10 million tons was appropriate given the inevitability of the gradual reduction of domestic coal production, whereas the Post-Eighth Coal Policy (1992–2001) considered the possibility of a phased end to production. In November 1990, the Coal Mining Areas Development Council reported that the November 1981 Law On Extraordinary Measures for the Development of Coal Mining Areas would be extended for a further 10 years until November 2001.

#### **4.4.3 Liberalization of the Electricity Market**

Liberalization of the electricity market also made progress (Kikkawa 2011, p. 284). The Electric Utility Industry Law of 1965 was completely revised in 1995. The main points of the revision were: (1) to expand new entrants to the power generation sector,

(2) to create a system related to specified electricity businesses, (3) to improve and mitigate price regulation, and (4) to clarify the responsibilities of electric power companies and rationalize safety regulations. For the first, the approval system for new entrants to electricity wholesaling was in principle abolished and a bidding system introduced. This enabled the entry of independent power producers (IPP). Improving and mitigating price regulation meant the shift to a notification system from the former set price menu aimed at load leveling. It also introduced ways of assessing the fees so as to easily compare businesses in terms of their efficiency. Finally, clarifying the responsibilities of electric power companies was an effort to limit government involvement to the minimum level necessary (Fig. 5).

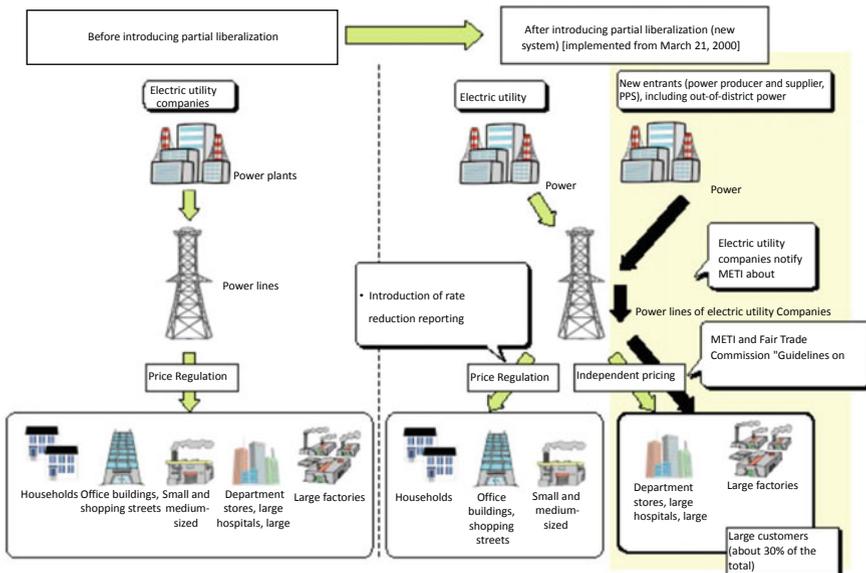
The “Electricity Business Act” was also revised significantly in 1999. Its main points were: (1) to partially liberalize electricity retailers and fully introduce the principle of competition in the retail sector for special high-pressure customers receiving 20,000 V (high-voltage) electric power of 2,000 kilowatts or more, (2) to establish a consignment system permitting electric power companies to open their networks to other electricity providers, (3) to shift from an approval system to a notification system with regard to reductions in electricity prices, and (4) to abolish the regulations on electricity businesses’ being involved in other businesses at the same time. These revisions brought new entrants to retail electricity and encouraged the emergence of specified electric utilities called PPS, or power producers and suppliers. They also stimulated competition among the nine electric power companies. For example, Tokyo Electric Power Company (TEPCO) established My Energy Co. in March 2000, began to supply electricity in the Tohoku and Chubu Electric power districts, and participated in the bidding on electricity provision in Sendai City (in Tohoku Electric’s district). The liberalization was not complete, however, and ordinary households and small and medium-sized factories were still operating in a regulated environment and supplied by their electric utilities as before.



**Fig. 5** Changes in the electricity supply system due to the 1990 Electricity Enterprise Reform. Source METI, Agency for Natural Resources and Energy (2004, p. 118); Kikkawa (2011, p. 301)

The trend toward liberalization continued. The February 2002 “Report of the Electricity Industry Committee” by the Advisory Committee for Natural Resources and Energy (established in January 2001) examined the experience of electricity liberalization thus far and took on the role of laying out new directions for deregulation. These included (1) further liberalizing the retail electricity sector, (2) reviewing the electricity retail consignment system (abolishing the transfer supply system in which charges were added for the use of transmission lines by multiple electric power companies), (3) establishing a nationwide wholesale power trading market (for PPS) and (4) reviewing the backup rules of the electric utilities (to reduce the burden on PPS by abolishing backup fees when accidents occur). These recommendations were reflected in the revised Electricity Business Law promulgated in June 2003 and implemented in April 2004 (Fig. 6).

Due to liberalization from the mid-1990s on, electricity rates declined steadily, reaching a reduction of 18% between FY 1995 and FY 2005. When liberalization of electricity retailing began in 2000, price cuts were observed not only in the sectors being liberalized but also in electricity rates for households. Despite soaring fuel costs, electricity rates declined by about 10% from FY 2000 to FY 2005. A report compiled by the Institutional Reform Evaluation Subcommittee, which was established within the Electricity Works Subcommittee in 2006, interpreted this to mean that the improvements in efficiency in the liberalized parts of the utility business were having an effect on the markets that remained regulated as well.



**Fig. 6** Changes in the electricity supply system due to the 1999 electricity enterprise reform. *Source Enerugi hakusho 2004 nenban*, p. 118. [II-10, p. 303]

By contrast, no significant results were apparent in the realm of stimulating competition. PPS market share remained low, and almost no power company competition developed across supply districts.

#### **4.4.4 Emphasis on Developing Nuclear Power**

It was in this context that interest mounted in nuclear power as a measure to address global environmental problems, and as other new developments were not making progress, nuclear power assumed greater weight in the overall composition of energy sources for power generation. It also took on more significance as an energy security policy to alleviate the effects of higher crude-oil prices, such that nuclear power began to be regarded as effective for both environmental and energy security reasons (Kikkawa 2011, p. 317).

However, other sorts of problems arose. First, trust in the safety of nuclear power began to waver due to a number of accidents in nuclear power plants at home and abroad. Second, establishment of the nuclear fuel cycle was not progressing as had been hoped.

Regarding the first of these issues, new safety enhancements were added every time a serious accident occurred. After the damage to the steam generation heat transfer tube at Kansai Electric's Mihama Power Station #2 in February 1991, electric utilities strengthened their quality assurance activities, improved the reliability of heat transfer tubes, and strengthened their voluntary security measures, for example by improving their maintenance management measures. MITI also reviewed construction plans and revised its list of items requiring inspection, as well as strengthening its guidance on and supervision of quality assurance measures. In response to the criticality accident at the Tokaimura JCO Company uranium processing plant in September 1999, the Law on Special Measures Concerning Nuclear Emergency Preparedness was enacted in December, with the aim of strengthening and enhancing nuclear safety and disaster prevention measures by establishing a Nuclear Emergency Response Headquarters headed by the Prime Minister. At the same time, the revision of the Law on the Regulation of Nuclear Source Material, Nuclear Fuel Material, and Reactors placed Nuclear Safety Inspectors at nuclear facilities and established a system to check whether business operators were complying with safety regulations.

An organizational restructuring that contributed to a significant strengthening of safety regulations was implemented as part of the 2001 reorganization of ministries and agencies. The Nuclear and Industrial Safety Agency (NISA) was established in the Agency of Natural Resources and Energy, uniting the nuclear safety administrations variously under the jurisdiction of the Science and Technology Agency and MITI. Just after NISA was established, it was discovered in August 2002 that TEPCO had concealed a problem, and this became a significant social issue. In December 2002, the Electricity Utilities Industry Act and the Nuclear Reactor Regulation Law were revised in order to prevent the recurrence of fraud and to introduce far-reaching reform to nuclear safety regulations. The revisions were expected to enhance the

activities taken by businesses to ensure security and to bolster the effectiveness of the safety regulations themselves.

#### 4.4.5 Promotion of the Use of Natural Gas

In the 1990s, the Agency for Natural Resources and Energy brought a new approach to promoting the introduction of natural gas. The “IGF (Integrated Gas Family) 21 Plan” proposed in January 1990 called for municipal gas utilities to shift from supplying low-calorific reformed gas such as naphtha or butane, to a high-calorific natural gas (Kikkawa 2011, p. 352). This would require modifying equipment and establishing plants for receiving and supplying natural gas, which in turn would require financial support. The Hokkaido Kitami City gas leak and carbon monoxide poisoning accident in January 2007 hastened the need to shift to high-calorific gas.

The decision to increase the use of natural gas was initially due to energy security concerns, but from the latter 1990s it was also seen as necessary from an environmental point of view. The New Energy Law of April 1997 is a clear indication of this view. In the mid-2000s, natural gas also attracted notice for economic reasons, because the price of LNG was not rising much compared with the soaring price of crude oil. The shift to natural gas was therefore occurring globally at this time.

Institutional reforms to promote liberalization progressed in the gas industry in general, beginning with the revision of the Gas Utility Industry Law in June 1994. Liberalization in the retail sector was promoted for large-scale customers whose annual contract gas consumption exceeded 2 million cubic meters with a calorific value of 46 MJ. Large customers could choose gas suppliers, and charges and services were left to negotiations between the parties. The scope of liberalization continued to expand thereafter.

In November 1999, liberalization was applied to customers with annual contracts for gas consumption of 1 million cubic meters or more and a calorific value of 46 MJ, and it became possible for the gas delivery conduits of general gas providers to also be used by other gas suppliers. With the 1999 amendment, competition began to cross industry barriers—the line between gas and electric or oil companies, for example—as well as increasing among gas companies themselves. The effect of this promotion of competition became evident in the 1995–2002 period when major gas companies cut rates by about 8–12%. A Partial Revision of the Electric Utility Industry Law and the Gas Utility Industry Law was made in June 2003, as part of the Electricity Business Law and the Gas Utility Act, and institutional reform continued to advance. The policies promoting gas liberalization were characterized by an emphasis on (1) more active participation of new entrants and (2) general gas companies’ actively providing large-scale supply outside their own supply districts. Gas liberalization was more successful than electric power liberalization in promoting competition. In fact, regarding point (2), general gas providers steadily increased their large-scale supply to areas outside their supply districts both in the number of such cases and in the amount supplied. General gas charges began decreasing in 2002 as well.

#### **4.4.6 Establishment and Revision of the Act on Rationalizing Energy Use**

The Act on Rationalizing Energy Use (“Energy Conservation Act”) was revised several times to respond to changing conditions. The second amendment, made in March 1993, was added for the purpose of promoting energy conservation for environmental reasons (Kikkawa 2011, p. 373). The third amendment, made in June 1998, followed on the conclusion of the 1997 Kyoto Protocol and more strongly reflected the emergence of the global warming problem. Behind MITI’s decision to revise the Energy Conservation Act in December 1997 was the aim of strengthening measures to secure strict energy efficiency standards in the automobile and electrical equipment sectors and to encourage rationalization in the planned use of energy in energy-consuming factories. In May 1998, the New Energy Department of the Agency for Natural Resources and Energy called for even greater energy rationalization in its Laws Concerning Rationalization of Energy Use and promoted amendment of the law in accordance with the Decision of the MITI Departmental Council.

Particularly significant in the private sector was the 1998 revision of the so-called Top-Runner System. In principle, this established the criterion that energy consumption efficiency be equal to or higher than the performance of the most energy-efficient equipment among the products on the market at that time, obliging everyone to comply with that standard.

### ***4.5 Technology Policy: A Shift in Emphasis from Basic Technology to Practical Applications***

#### **4.5.1 Vision of the 1990s and Industrial Technology Policy**

Industrial technology policy began to focus on basic research in the 1980s. Questions began to be raised in the 1990s about approaches to the national research institutions and change became inevitable as subsidy systems and plans for international contributions came under review. These changes took on clarity in the 1990s. That is, because of the creation of new industries and employment issues it had prioritized as policy issues, the tone of policy changed from “shifting to basics” to “shifting to practical applications” (Sawai 2011, p. 43).

The Industrial Structure Council report that laid out the industrial policy vision for the 1990s (*1990s Policy Vision*) proposed techno-globalism as the philosophy to which Japan should aspire. That is, in contrast with the growing protectionist approaches to technology (so-called techno-nationalism), Japan would now “work to cooperate with other countries to stimulate creative activities and distribution and relocation activities at the international level, with the goal of [contributing] the greatest utility that science and technology can bring to humankind.” Thus the trend toward international contributions was further strengthened.

“Trends and issues in industrial science and technology: towards technological symbiosis on a global scale,” a MITI publication of 1992, asserted the importance of promoting not only techno-globalism but also human- and environment-friendly technology systems. Alongside the continued promotion of basic research and international contributions, environmental concerns were added to policy thinking. The title does not refer to “industrial technology” but rather to “industrial science and technology,” meaning that its contents focused on the relationship between science and technology with scientific advances encouraging the development of industrial technology and technology stimulating scientific research. The industrial technology white paper of 1988 emphasized the close relationship between science and technology, and given that the report saw industrial technology policy as referring to industrial science and technology, it is evident that policy was emphasizing the development of paths to the application of basic research. But it was in the late 1990s that the practical applications were made a clear priority.

The Innovation Study Group, established in July 1997 as a private research group of the MITI Industrial Policy Bureau’s Director-General, compiled an interim report in June 1998. It suggested that technology policy should aim for a society in which innovations follow one after another. For “a new perspective on future technology policy,” it highlighted the following: (1) developing of technology policy aimed at businesses and individuals; (2) restructuring the technology policy system based on implementing innovation; (3) expanding policy targets to respond to the development of information and services; and (4) improving research to support the formulation of new strategies for government and enterprises. In addition, it emphasized the importance of reflecting market needs, and “the need to move from a ‘development-centric’ technology policy system to a focus on aspects besides technology ‘R&D’ and to develop and expand policy systems that prioritize, more than before, accurate feedback of information from society.” In this way, the focus of industrial technology policy shifted to applied research and practical applications.

#### **4.5.2 The Advance of Techno-Globalism**

The 1990s was marked by debate over changing the existing approaches to industrial technology policy with an emphasis in the late 1990s on the role of government in applied research. For example, the Planning Committee of the Industrial Technology Council issued a report in June 1992 titled “Techno-globalism promotion and multifaceted promotion of COE,” notable for its use of the term “COE” or “Center of Excellence” (Sawai 2011, p. 72). COE refers to “a research hub that naturally draws the greatest minds from around the world, and the achievements of which are recognized globally.” The aim was to promote techno-globalism by fostering COEs and international contributions in the fields of industrial science and technology. Among the concrete measures were “reforms to enable original basic research,” which referred to reform of the so-called national projects. This led to a review of existing R&D projects in industrial science and technology and to bringing the FY

1993 Industrial Science and Technology Frontier Program and the New Sunshine Project to fruition.

Successive reports in the latter 1990s reflected the trend of emphasizing practical applications. For example, the July 1996 Secretariat of the General Subcommittee on Industrial Technology Council report titled "On issues for review in industrial technology policy" was based on examination of the serious problems arising from three consecutive years of decreased R&D investment. Specific industrial technology policies included (1) strategic promotion of private R&D, (2) creation of industrial "seeds" to bring together the strengths of industry, academia and government, (3) institutional reform of the national research institutions, and (4) institutional reform of the national universities. Meanwhile, another debate unfolded in the Industrial Technology Council, on the reflections or doubts that had gradually emerged about the "shift to basic research." In the 31st Coordination Subcommittee in July 1996, for example, committee members argued that "MITI had unconsciously been avoiding government involvement in applied technology over the past ten years, due to criticism from abroad, especially the US. It made its selections based on a bias toward the assumption that basic technological development was needed.... [and] given the sense of crisis in industry, which means that technological development is needed, the question should actually be whether the potential for commercial applications should be the evaluation criteria." At the 34th Coordination Subcommittee meeting in August 1997, the Secretariat went so far as to say, "The main emphasis should be the forceful promotion of R&D for the creation of new industries.... The priority, which had shifted to basic research, needs to return to industrial R&D."

Based on discussions in the Council for Industrial Competitiveness, established under Prime Minister Obuchi in March 1999, the Headquarters for Industrial Structural Reform compiled its report, "On emergency measures for employment and for strengthening industrial competition." The National Industrial Technology Strategy Review Committee followed with the "National industrial technology strategy" in April 2000. Based on the Industrial Technology Council's recommendation set forth in August 1998 in "Constructing a new industrial technology policy," the Agency of Industrial Science and Technology proceeded with its exploration of an "industrial technology strategy," the outcome of which was in turn reflected in the Industrial Technology Council's April 2000 report, "Industrial technology strategy (Future directions for industrial technology policy)." The Strategy included the following specific measures for building a system for internationally competitive "new-frontier" innovation: (1) nurturing the human resources and venture businesses that are the driving force behind technological innovation, (2) reforming the institutions that are the starting point of technological innovation, (3) strengthening true collaboration among industry, academia, and government to promote technological innovation, (4) building a flexible government system to accelerate innovation, (5) developing the foundation for support of technological innovation, and (6) forming an intellectual society capable of technological innovation. The Strategy also called for industry, academia and government to collaborate on industrial technology policy outside the framework of ministries and agencies. The proposal can be seen as a plan for establishing the necessary foundations for promoting industrial technologies linked

to practical use. The “National Industrial Technology Strategy” was developed in this spirit and was reflected in the Second Science and Technology Basic Plan (FY 2001–2005).

### **4.5.3 Intra-Governmental Coordination with the Enactment of the Science and Technology Basic Law**

In the latter 1990s, the industrial technology policy-making process was changed by the enactment of the Science and Technology Basic Law in November 1995 (Sawai 2011, p. 106). The Law charged the government with preparing a Science and Technology Basic Plan based on Council of Science and Technology deliberations in order to comprehensively and systematically advance policies on promoting science and technology. The legislative measures and the plans based on them reflected both the requests coming from university and national laboratory researchers seeking improvements in the research environment and more funds for research, and the high expectations of industry for public-sector R&D. They were concrete policies linked with the shift to practical applications and drew on views from across the government’s ministries. This direction was also given support in December 1996 by the Hashimoto cabinet, which presided over a change from a bottom-up to a top-down process in policy-making. Policy developed by single ministries and agencies in response to the prolonged and severe recession had not had much effect, leading to moves to review the bureaucracy’s traditional vertical divisions. MITI was already collaborating with the Ministry of Education and the Science and Technology Agency, but further intra-governmental coordination was required even from MITI to make progress in creating new industries that would maintain and expand employment.

### **4.5.4 Renewal of the Industrial Science and Technology Development System**

The early 1990s also saw continued review of the R&D project system. National projects were examined as part of the debate on new policies for FY 1993, and the following points emerged: (1) The system needed reorganization because the differences were receding between the R&D of the Large-scale Research and Development Project system (system-oriented, LRDP) and the Next-Generation Research and Development system (elements- and materials-oriented, NGRDP); (2) active implementation of government projects was needed for technological development aimed at achieving comfort and affluence because of difficulties with the private sector actively taking the lead; and (3) comprehensive implementation of R&D in new energy (Sunshine Project), energy conservation technology (Moonlight Project), and environmental technology (especially CO<sub>2</sub>-related technology) was needed because of the intimate relationship among these technologies. This definition of the issues meant fundamental reform of the LRDP and NGRDP programs and comprehensive

promotion of technology development in energy and the environment. Domestic and international criticism formed the backdrop for these changes. In Japan, the criticism was based on the awareness that Japan was lagging in its effort to catch up with the R&D taking place in the West. Overseas, the existing approach was regarded as unfair, because it involved subsidies to specific industries.

It was in this context that the LRDP, NGRDP, and Medical-and-Welfare Technological Development systems were integrated into the Industrial Science and Technology Frontier Program (“Industrial Technology System”) (Sawai 2011, p. 206). The requirements for R&D targets were (1) that they involve areas of basic or innovative research, or (2) that they were public, social, or welfare needs. These requirements were based on the idea of “shifting to basic and innovative research and to mission-oriented technological development (for public needs).” The first was aimed at “R&D that would provide basic technologies with significant spillover possibilities for industry 20 or 30 years down the line, and at organizing the foundations needed for promoting science and technology.” Among the approaches adopted was a method in which R&D officers would be placed in their separate fields as defined by existing projects. This was aimed at making it easier to reduce or scrap research projects based on priority fields, thus reducing the significance given to the particular framework in which the project had been carried out.

As described above, the reorganized industrial technology system was once again reorganized in FY 1998 in line with the May 1997 “Action Plan for Economic Structural Change and Creation” Cabinet Decision. The industrial technology system referred to basic technology, and two new systems—“applied industrial technology” and “university-linked”—were added. These three projects were conceived of as “new industrial creation-oriented industrial science and technology R&D.” The applied technology project was expected to support R&D at the applied research stage, where the private sector was deterred by the high risks and costs involved, even where the development of new creative technologies could be expected. University-linked R&D aimed at discoveries that could lead to a flowering of new industrialization. R&D under the new system applied to six sectors, including new materials, biotechnology, electronics–information–communications, machinery–aviation–space, people–life–society, and medical care and welfare.

Eight new projects were undertaken in the industrial technology system described above from FY 1994–1997 (until the reorganization), in the fields of new materials, biotechnology, electronics, information, communications, machinery, aerospace and space. Despite the vigorous development of these projects, it was clear from a survey of 500 companies conducted in 1999 that most companies that participated in the national projects had higher hopes of the subsidies than of the collaborative research.

#### **4.5.5 Reform of the National Innovation System**

From the late 1990s, the national innovation system underwent a major transformation due to greater industry–academia collaboration, itself the result of the sense of crisis at the decline of international industrial competitiveness (Sawai 2011, p. 226). The change was also an example of the priority placed on practical application.

The Agency of Industrial Science and Technology believed that the key to responding to the hollowing out of the industry was to create new industrial fields. It had been promoting a “regional consortium R&D system” since 1997 to foster regional enterprises that could be relevant around the world. Utilizing the existing technology “seeds”—national laboratories, universities and others—to promote R&D aimed at commercialization, these institutions and private companies together constituted a regional consortium. The recipient of government subsidies was not a specific business operator but the consortium itself, called New Energy and Industrial Technology Development Organization (NEDO), and a committee of outside judges was established to provide expert evaluation of the projects (Table 8).

The Law on Promotion of Transfer of Research Results on Technologies at Universities to Private Business Operators (“Technology Licensing Organization

**Table 8** Budget for NEDO projects (million yen)

FY	New energy accounts	Account for industrial technology R&D	Investment account for industrial technology research infrastructure	Coal rationalization account	Coal mining account	Alcohol account	Total
1980	17,138			111,430			128,568
1981	38,160			220,019			258,179
1982	53,262			109,559		5,538	168,359
1983	55,152			89,859		13,046	158,057
1984	54,425			85,924		15,994	156,343
1985	60,263			79,696		12,893	152,852
1986	63,158			76,883		13,935	153,976
1987	67,322			194,311		9,212	270,845
1988	63,335	4,725	1,500	193,358		8,048	270,966
1989	67,499	15,137	2,200	161,996		9,334	256,166
1990	70,241	20,336	2,200	129,061		10,303	232,141
1991	60,884	25,536	2,400	97,432		10,843	197,095
1992	66,200	30,144	700	126,246		11,658	234,948
1993	79,808	36,421	2,400	99,034		11,635	229,298
1994	78,684	36,627	700	98,117		10,315	224,443
1995	97,506	24,877		92,850		9,544	224,777
1996	97,623	32,183		91,931	79,978	10,155	311,870
1997	95,203	41,056		92,240	81,937	11,796	322,232
1998	123,284	55,247		31,603	82,819	12,282	305,235
1999	147,007	68,908		24,760	59,209	12,602	312,486
2000	152,570	92,862		23,039	89,928	13,041	371,440

Source Sawai (2011, pp. 282–283)

(TLO) Law”) was passed in May 1998 and came into effect in August. It set out government support for Technology Licensing Organizations acting as intermediaries for transferring the technology and research results of universities and other institutions to private enterprises. Support measures included: (1) utilizing the Facilitation Fund for Industrial Structural Adjustment to give debt guarantees, issue grants, and provide information for university technology-transfer projects, and (2) utilizing the special measures of investment by Small and Medium Business Investment and Consultation Co., Ltd. for venture- and small and medium-sized enterprises to make use of the results of university research. Previously, when university research was put into practical use, the private enterprise involved in a collaborative research exchange with the university applied for its own patent for the invention, and the research lab accepted the company’s researchers into the lab and offered technical advice on the invention, receiving donations of scholarship funds from the companies in exchange. However, this framework invited criticism because its methods of transferring research were not systematic and SMEs could find themselves excluded. The TLO Law sought to address such concerns.

Evaluation of the National Projects also became stricter in the 1990s. A technical evaluation office was established in the General Coordination Division of the Agency of Industrial Science and Technology in October 1996 to pull together the post-project evaluations issued by the various departments. This was reorganized in July 1997 into the Evaluation Division, and added to its duties were the operation and management of the technical evaluation system covering the entire ministry. This was intended to clarify even further the distinction between the promotion and the evaluation departments. Meanwhile, in August 1997, MITI issued “Technical Evaluation Guidelines” in accordance with the “Guidelines for Implementing Evaluations Common to All National R&D” compiled by the Science and Technology Council in July. Formulated in January, the Guidelines promoted stricter evaluation. The Guidelines were based on (1) transparency, (2) neutrality, (3) continuity, (4) effectiveness, and so on. The intermediate evaluation to be conducted by August 1998 was designed to stop technically obsolete development and to establish priorities for development goals.

#### **4.5.6 Promotion of the New Sunshine Project**

In addition to the Sunshine and Moonlight Projects, each laboratory of the Agency of Industrial Science and Technology launched “Research and Development on Global Environmental Technology” beginning in 1989, to address carbon dioxide problems. Since the result was the emergence of parallel technologies, the National Institute of Advanced Industrial Science and Technology on May 25, 1992, suggested the following: “Because energy and environmental technology development (especially CO<sub>2</sub>-related) are closely related, our new energy (Sunshine Project), energy conservation (Moonlight Project) and global environmental technology development projects should be integrated and a comprehensive R&D program promoted for basic and applied research.” In December, the Industrial Technology Council’s New

Energy Technology Development and Energy Conservation Technology Development subcommittees, and the Joint Planning Committee of the Global Environment Technology Committee held a “Mid-term Seminar” that compiled a report titled “Comprehensive Development of the New Sunshine Project to Support the 21st Century.” This led to the establishment of the integrated “New Sunshine Project” in FY 1993 (Sawai 2011, p. 267).

The plan consisted of (1) innovative technology development: steadily accelerating promotion, in an internationally open regime, of innovative energy and environmental technology development projects aimed at realizing the “Action Plan for Preventing Global Warming,” (2) large-scale international research: promotion of large-scale international collaborative research aimed at advancing the “New Earth 21” Program, and (3) collaborative research on appropriate technologies: advancing collaborative research programs on energy and environment-related technologies to support the easing of energy and environmental constraints in developing countries neighboring Japan. From FY 1993–2000, a total of 3.547 billion yen of national funds went into the projects. Among the largest research areas were coal liquefaction and gasification technology (838 million yen), solar energy (648 million yen), and geothermal energy (289 million yen). The system underwent reform in FY 1997 to stipulate: (1) an R&D period limited in principle to five years, (2) maintenance of a competitive and efficient research implementation system, and (3) the construction of a strict evaluation system (Table 9).

#### **4.5.7 Reorganization of the New Energy Development Organization**

The New Energy Development Organization (NEDO) was reorganized based on the May 1988 Law Concerning the Improvement of the System of Research and Development in the Field of Industrial Technology (effective December 1989) (Sawai 2011, p. 281). As a result, management and operations, international industrial technology-related businesses, and research infrastructure improvement projects that had been variously part of the Large Projects, Next-Generation Technology, and Welfare Equipment Technology R&D were brought into the Industrial Technology R&D Department. The Industrial Technology Department was composed of an R&D Section, an International Collaborative Research Section, and a Research Infrastructure Development Section.

Industrial technology-related tasks were added to NEDO, which was responsible for the development of new energy, and NEDO became the New Energy and Industrial Technology Development Organization (the NEDO abbreviation remained unchanged). The reorganization occurred because the management burden of the National Institute of Advanced Industrial Science and Technology was excessive given the large number of research associations. Given also that the majority of these involved joint research with the private sector, NEDO was given responsibility for coordinating among them. A further aim involved lifting the research funds for the

**Table 9** Changes in the budget of the new sunshine project (million yen)

FY	Reusable energy	Advanced use of fossil fuels	Energy transport and storage	Technology for environmental measures	Systematization technology	Basic energy and environmental technology	Technology for meeting COP3 targets	Other	Total
1993	13,317	21,472	4,724	267	1,020	130		106	41,036
1994	12,411	21,015	5,186	277	2,011	107		63	41,070
1995	12,421	20,859	5,649	379	2,468	94		60	41,930
1996	12,540	20,529	5,358	385	3,100	2,020		61	43,993
1997	12,272	18,796	5,319	536	4,234	3,551		56	44,764
1998	12,092	15,612	8,514	615	4,188	3,662	2,000	58	46,741
1999	12,754	11,135	10,780	724	4,065	4,213	3,236	56	49,062
2000	11,325	7,897	9,978	4,208	3,857	4,471	4,257	151	46,123
Sub-total	99,132	137,315	55,508	7,391	24,943	18,248	9,493	611	354,752

national projects outside the “ceiling” framework. The Industrial Technology Department, having overcome the initial problem of securing human resources, added new projects in the 1990s as well as integrating existing R&D projects with one another, and promoted a range of R&D.

Among the above measures on energy, the promotion of new energy had the following results: The ratio of “new energy, etc.” to the total primary energy supply did not meet the targets of 1.0% in 1980, 1.3% in 1990, or 1.1% in 2000. However, as evident in the spread of solar power, it is clear that efforts to develop new energy have seen steady progress.

#### **4.5.8 Aligning Japanese Industrial Standards (JIS) with International Standards**

The Agreement on Technical Barriers to Trade (TBT Agreement) came into effect in January 1995 as part of the WTO Agreements (Sawai 2011, p. 388). This Agreement, which inherited and built on the GATT Code of Conduct, aimed to ensure that any given country’s standards and conformity assessment systems are not more trade restrictive than necessary to achieve a legitimate objective. Countries were required to adhere to the principle of non-discrimination between domestic and foreign businesses in applying systems, such as ensuring transparency when formulating standards or using international standards. Inevitably it became necessary to abide by the TBT agreement, and therefore ensuring Japanese Industrial Standards’ (JIS) consistency with international standards became an urgent matter. Meanwhile, the US–European summit meeting of December 1995 triggered many proposals from US and European industries regarding standardization policy.

Against this backdrop, Japan revised its Industrial Standardization Law again in March 1997. The revision entailed a zero-based review of JIS enactment procedures and of certification systems such as the JIS mark, and so on. The first involved a comprehensive inspection of standards from FY 1997–1999 based on the Japan Industrial Standards Committee’s December 1996 report titled “On reviewing the industrial standards system.” For all 5,200 standards under review, a zero-based review was conducted regarding the relevant ministries, bureaus, industrial associations and users. This led to the abolition of 465 standards by FY 1999. The change was based not only on the international harmonization, but also on changes in the emphasis on standardization in the 1990s that led policy to reflect the points of view not only of efficiency and quality improvements in production but also of an aging and welfare-oriented society, consumers, the global environment, advanced technology, and so on.

#### **4.5.9 Toward an Ideal National Examination Research Institution**

In January 1990, the Agency of Industrial Science and Technology decided to review the system of test laboratories with an eye to the future (Sawai 2011, p. 408). The decision was taken because basic and original research were expected to become only

more important, and “The need is growing for a review of the research system from the long-term point of view, so that the Research Institutes of the Agency of Industrial Science and Technology, which are not only a venue for promoting industry for the 21st century, but are also backed by basic and original research, can serve as a base for providing the seeds of research in our country.” The Agency Decision called for (1) improvement of the system in the areas of goods and materials research and biological and ergonomic research, (2) improvement of research related to global environmental issues and to resources, security, and so on. A Review Committee was established in April and its final report, also issued in April 1992, called for a reorganization of the National Chemical Laboratory for Industry, the Fermentation Research Institute, the Research Institute for Polymers and Textiles, and the Industrial Products Research Institute. Three new institutes were proposed for establishment by January 1993: the Institute for Materials Science, the Institute for Biotechnology, and the Institute for Industrial Science and Technology.

Along with these reforms, a “Competitive R&D System” was established for industrial technology in 1997. Researchers at national research institutes were asked for research themes, and based on review by outside experts, research funds were allocated to the proposals deemed most effective for research. In 1999, the “industry–academia–government collaborative competitive R&D system” was established in recognition of the need for collaborative research by the three sectors. These represented the search for ways to utilize research resources more effectively.

Meanwhile, the December 1997 “Final Report” by the Hashimoto Cabinet’s Administrative Reform Council determined that the 15 laboratories and the five labs under the Science and Technology Agency could become administratively independent. The Agency of Industrial Science and Technology responded immediately and in July 1998 established the “Industrial Technology Research Deliberation Office” to explore ideal approaches to a post-administrative-reform industrial technology system and to the establishment of a system for independent administrative corporations. In 1999, the office was reorganized into the “Industrial Technology Research Organization Development Promotion Office.” The promotion office set up seven working groups, including a Basic Principles Working Group to advance these propositions. The Basic Principles Working Group issued its final report in March 2001. The report pointed out seven broad problems with the Institute of Advanced Industrial Science and Technology. The main issues were that: (1) the social role and mission of the institute was not clear, (2) the Institute’s selection of appropriate research subjects, setting of goals, and intensive introduction of research resources were inadequate, (3) it did not adequately understand the needs of the citizens and industry that should be the beneficiaries of a national institute, and the cases of research with no vision of an exit was increasing, and (4) the R&D capacity of industry had improved and the role of the research institute as a core for R&D was ambiguous, and so on.

The report suggested various ways of overcoming these issues, based on the following thinking:

To have a clear division of labor as expressed in our very terminology—*academic*, meaning basic research, *government* (National Institute), meaning applied research, and *industry*, meaning research on practical uses—is inefficient from the point of view of national investment in research. For this reason, we believe that the need will grow greater and greater for [someone] to assume the role of overseeing R&D from the entry point of technology (in former wording, “basic research”) to the exit (practical use). The national laboratory, which formerly served as a bridge between academia and industry, is in the optimal position to fill this role.

The National Institute was thus expected to help bring vitality to the national innovation system by acting as a link among academia, industry, and government and keeping an eye on the entire process from basic research to practical application, or entry to exit. In concrete terms, this meant changing the framework of the National Institute. The 15 research labs under the old Institute and the 16 organizations of the Weights and Measures Training Institute together became the National Institute of Advanced Industrial Science and Technology (AIST).

As discussed above, R&D activities had either been conducted by the national government itself at national laboratories or commissioned. Collaborative research in commissioned research was conducted under the Large-scale Research and Development Project system, the Next-Generation Research and Development system, Sunshine, and Moonlight Projects, and financed by subsidies, investment and financing systems, tax credit systems, and other means.

However, these various policy tools had to change after the 1980s. Low interest rates persisted, but their significance declined as companies diversified their sources of financing; meanwhile, subsidy administration declined greatly due to serious technical conflicts. In addition, the methods governing commissioned research also came under review, and the overall restructuring of the industrial technology system, including the New Sunshine Project and others, was forwarded. The catch-up period ended in many sectors as did the era of high-speed growth, and as expressed in the Industrial Structure Council’s call for “original and autonomous technological development” in its *Vision of the 1980s*, industrial technology policy as a feature of a developed country came into question.

In such an environment, it was not easy to decide on a set of “national” principles for industrial technology policy. Around 1999, the shift to “basic technology” promoted in the 1980s was recognized to have little chance of succeeding, first, because of the unavoidable inadequacy of basic research in a period of persistent trade friction and second, because the research could not immediately help in creating new products. This led to the question of what direction should be given the national projects, which had been selected through intricate information exchanges with separate industries. In other words, it revealed the difficulty of deriving a “national” point of view by bundling individual projects together.

In fact, the same problems arose even in the later stage when the emphasis had shifted to practical applications. For example, the “Public Application System for Proposals to Create New Industries” aimed to maintain and expand employment in the latter 1990s, but it proved difficult to devise concrete measures for its principles. Conversely, even programs like the Sunshine Project, which were linked with

resources and energy policy and therefore had clear strategic importance, proved limited as seen in the gap between the results and the original aims. Precisely because its goals were clear, its results were subject to harsh questions and left an impression of inadequacy. In that sense, just discovering “national” tasks was not necessarily enough.

As the trend in policy continued to shift from basic research to research for practical use, various reforms were sought such as the reorganization of the national institutes, as well as subsidies for joint research and plans for research cooperatives. However, the significance of collaborative research itself was not lost just because of changes in the systems of collaborative research. Rather, strategic technologies were decided on through joint research. Most private enterprises were not blessed with resources enough to pursue strategic technologies on their own. Therefore, although reviewing policy measures was important, it was also important to continue to question the role of industrial technology policy in response to the changing international environment and science and technology. Strategies were needed for finding Japanese institutions’ comparative advantages for maintaining employment and creatively expanding it, and the ideal nature of the industrial technology policy was therefore a matter of debate.

## ***4.6 New Trends in Pro-Patent Policy***

### **4.6.1 Patent Law Revision**

The intellectual property system was subject to mounting demands in the 1990s, and its role expanded as a result. Japan’s position as a leading economy was only getting stronger, and if it intended to develop its competitiveness further, it would have to launch state-of-the-art technology and ideas on its own. The importance of intellectual innovation in technology was increasing dramatically, along with the importance of “information” and the advance of “globalization.” This recognition was strengthened by the fact that the TRIPS Agreement came into force in 1995 and various domestic reforms thereupon came to an end (Nakayama 2013, p. 26).

The Roundtable to Consider Intellectual Property Rights in the Twenty-First Century was established as a private advisory body to the Commissioner of the Patent Office in December 1996. Its April 1997 report said that innovation in “information” systems and “globalization” were the two forces that would be key in the twenty-first century and pointed out that, in order to overcome the problems that would arise from the development of science and technology in this environment, intellectual property, beginning with technology, needed to be “created,” that creation needed to be “protected” as a clear right, and that intellectual property needed to be sufficiently “used.” Furthermore, the profits acquired through that use needed to be invested to create new intellectual property, in order to build an “intellectual creation cycle.”

The report also noted that although the United States had emphasized “intellectual property rights” since the 1980s, Japan’s recognition of the idea remained poor, and

that a shift to a “pro-patent” policy, meaning a policy of active support for patents, was needed. Eight recommendations were made to define “a direction for future intellectual property rights”: (1) “broad protection” for intellectual property rights, (2) “strong protection,” (3) “promotion of the intellectual property rights” of universities and laboratories, (4) the establishment of a “patent market,” (5) realization of “electronic patents,” (6) promotion of “cooperation with developing countries,” (7) establishment of a path to “a common world patent,” and (8) national efforts on “intellectual property rights policy.”

Based on this report, various reforms were pursued. First, the Patent Law was amended twice in the late 1990s (Nakayama 2013, p. 227) and with the amendments, the Patent Law and Utility Model Law differed greatly in character from the prior laws. This was because their purpose now was not only to ensure the prompt granting of rights and protection, but also to increase the value of the intellectual property right itself. The change reflected Japan’s status as a front-runner and the emerging policy issue of how to raise the value of intellectual property rights and thereby promote innovation for the country as a whole. In April 1997, the System Committee’s Subcommittee for Damages in the Industrial Property Council began deliberating on these questions and in December issued a report that led to systemic reform (Nakayama 2013, p. 283). The chief revision in the May 1998 amended law involved review of the question of civil remedies. The aim was to address those situations where infringement of patent rights was hard to prove. In the system as designed, a person who took actions that might be infringement but continued business as usual as long as the infringement was not discovered might even upon discovery only have to pay the amount equivalent to the usual royalty fee, although after the fact. Revision of the rule would make it easier to prove a loss of profits and determine an amount equivalent to the implementation costs under the specific circumstances in question, but this would also require a review of criminal penalties.

Thus even where the legal provisions on acts of infringement and on damages were eased, it was not actually easy to collect evidence from the infringing party. The need arose, therefore, for ways to enable plaintiffs to gather proof for legal proceedings. Under the revised law of March 1999, rules were established to make it harder for “infringers” to deny redress by pleading the right to maintain trade secrets. The period for requesting an appeal was also reduced from a maximum of seven years to three years. The aim was to shorten the grace period in which the patent applicant could consider whether to review the right under which the patent application was filed so as to minimize the length of time during which the rights themselves were uncertain. This was intended to pave the way for third parties to utilize the technology in question.

Revisions continued to be made to the Patent Act and Utility Model Law after 2000 as well. The “pro-patent” policy meant reforms to enable a strong, broad, and rapid means of protecting technological inventions and ideas, including a 2002 expansion of provisions for indirect infringement and 2004 rules strengthening criminal penalties for infringement.

#### 4.6.2 Revision of the Design and Trademark Laws

Second was revision of the Design Law. In the late 1990s, “design” came to be regarded as an important element in a product’s appeal and competitiveness. However, the existing laws on design had not undergone significant revision since 1984, and not only were they inadequate for addressing the diversification of design development, but skillful imitations had also become a concern as having a deleterious effect on investment in design (Nakayama 2013, p. 311). For this reason, the Design Subcommittee was added to the Industrial Property Council in April 1997. Based on the Subcommittee’s report, the revised Patent Law of May 1998 included protection of partial designs. Design development had shifted increasingly to the creation of parts of products. This enabled greater added value and product differentiation. Imitations of partial designs had increased, too, creating a greater need for protection. The requirements were made more stringent to ensure that the products were not something that anyone could easily make. The revisions went further, attempting to improve protection so as to conform to the “pro-patent” policy. A revised law was announced in June 2006 that extended the duration of design rights and expanded protection to include on-screen design, among other measures.

Third was amendment of the Trademark Law (Nakayama 2013, p. 321). With the growing internationalization of economic activity in the 1990s, harmonization and simplification of the trademark system became an important issue. At the Diplomatic Conference for Adoption of the Amended Convention on Trademark Law held in Geneva in 1994, the Trademark Law Treaty (TLT) was adopted with the aim of overcoming these issues, and Japan had to respond accordingly. At the same time, the problem emerged in Japan of a narrowed range of trademark options due to the accumulation of unused trademarks. A revised Law was published in December 1996 taking these issues into account. The following revisions were made to respond to the Treaty on Trademark Law. (1) The introduction of a multi-division application system: Japanese Trademark Law prescribed the principle of a single application specifying the designated goods or services “within the classes of goods and services specified by Cabinet Order,” and any number of products or services could be designated so long as they fell within that class. The Trademark Law Treaty, by contrast, required permitting the use of multi-class applications, making revision of Japanese law necessary. This simplified the procedure so that the applicant did not need to prepare a separate application for each classification. Other revisions to the Law involved (2) simplifying the items to be written in the application form, (3) eliminating the substantive examination formerly required upon renewal and of the confirmation of the use of the registered trademark, and (4) simplifying proxy procedures. The revisions of measures to address inactive trademarks included an improvement in the trial system for removing unused trademarks that aimed to strengthen procedures for checking on possession of inactive trademarks from the point of view of the public interest. Other improvements included ensuring the prompt granting of trademark rights, which was made necessary by the shortened life cycle of goods and services; improved protections for “well-known trademarks” (nationally known trademarks

with high credibility); introduction of the three-dimensional trademark system; and introduction of the collective trademark system.

The Trademark Law was revised again in 1999. The aim was to promote the creation of a domestic mechanism to align with the Madrid Protocol, which established an international trademark registration system. The Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks (“Madrid Protocol”) was the result of a growing call for the international protection of trademarks and, adopted in June 1989, it came into effect in December 1995. Institutional measures were launched in April 1996. In response, preparations were made for the provisions accompanying the Treaty and for legislation on the trademark review period. Additionally, a system of Regional Organization Trademarks was introduced and revisions were made to protect regional branding.

Amendments to the Unfair Competition Prevention Law were also made in the latter 1990s to improve the intellectual property system, and software protection was promoted as well. Regarding protections for software, the Patent Office formulated “Operational Guidelines for Computer/Software Related Inventions” in February 1997, so that “recording Media for recording computer programs” became subject to patent. Furthermore, in December 2000, the “Criteria for Inventions Relating to Computer/Software” were revised, and it was clearly stated that those computer programs that were not recorded on recorded media would also be treated as “invented things.” This judgment was given legal clarification by the 2002 revision of the Patent Law. Intellectual property rights pertaining to software were thus improved within the framework of the Patent Law.

In February 2002, Prime Minister Jun’ichiro Koizumi announced that a Strategy Council on Intellectual Property would be established and the necessary policy measures advanced, and in accordance with this policy and the Council’s deliberations, an “Outline on Intellectual Property Policy” was formulated, leading to the enactment of the Basic Law on Intellectual Property in March 2003.

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