Challenging the Transition of Civilization: Theory and Practice of "Energy Democracy"

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Abstract Today, wind powers and solar powers have become the main stream of energies. Everyone, from major electric power utilities to mega capital investors, has entered the renewable energy sector, increasingly and rapidly expanding the mass capital investment projects in the world. It is not rare to find cases of such mega projects developing confrontations with local communities. Since 1990s, the privatization of energy sector has been significant, with Nordic countries and Germany seeing the advancement of privatizations among community-operated energy utilities. Recently, however, there has been the movement to re-review such trend "to revive public utilities". The recent reversal of privatization trend means that the conventional way of decision-making participated by local governments and handful corporations is no longer appropriate, and there is a rise of common understanding that the decision-making and governance method of local communities must be open and distributed horizontally. The rapid progress of ICT in recent years has raised awareness of risks in the governance system dominated by private companies, while raising technical capabilities to realize new and open decision-making and governance in local communities.

Keywords Post Covid 19 · Green new deal · New global trends (electrification, transportation, sharing economy) · Deregulation · Public common · Public participation · Power to the people

1 Introduction: Philosophy of "Unlimitedness Within"

One year after the annexation of Korea in 1910, Kanzo Uchimura (1861–1930) discussed the national image of Japan that was purely contradictory to the colonialism course of external expansion Japan was to pursue later, in reference to the course Denmark, another "small nation," was taking (Uchimura, 1946). Contrary to the power political worldview at that time to pursue exclusively the policies "to enrich

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the nation and to strengthen the military," either to become a colony of another nation or to colonize them, Uchimura presented an interesting challenge of what constituted the true "national power" that would determine the rise or fall of a nation.

"The rise or fall of a nation will not depend on the winning or losing of a war, but will solely rest on the peacetime cultivation of its citizens. (. . .) With a solid and strong spirit, a defeat in war will become a good stimulant to bring prosperity to unfortunate citizens. Denmark is a very good example." (Page 92).

From such viewpoint, Uchimura suggested the "external limitedness" of a nation that tried to conquer other nations, and presented the political potential of the "internal unlimitedness" of a nation that relied on internal development, like Denmark. After losing several national territories from defeat in the war, Denmark headed in the direction of "internal unlimitedness," which meant exploring its rich natural environment, natural energy resources, and, most of all, the spiritual potentials of each individual citizen of Denmark. "Prosperity is the rationalization of energy (power). Yet, energy can be found in sunlight. Also, in the waves on the ocean. In the blowing winds. In the erupting volcanoes. If we can utilize such energies, all of them will become the sources of prosperity. There is no need to become the owner of one-sixth of the global land surface, like the United Kingdom. The land area of Denmark is sufficient. Even a smaller area would be sufficient. Rather than expanding toward other nations, we must develop our own land." (Page 93).

What Uchimura noted on the national development of Denmark was how it explored the future of a nation through the development of renewable energy and the education of its citizens, while abandoning colonialism. In the international environment at that time, where powerful nations battled over fossil fuels and markets, it was doubtful that Uchimura's national vision would ever be accepted widely as a "realistic" one. After experiencing the collapse of the Japanese invasion of Asia, atomic bombs, and national defeat in 1945, and even "the second defeat" due to terrible accidents at TEPCO's Fukushima Nuclear Plant No. 1 in 2011 ("3.11"), now may be the time to reflect on the "realism" and foresightedness embraced in Uchimura's statement.[1]

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[1]Uchimura described Denmark as having the "greatest per capita wealth in the world" at that time. Today, Denmark is one of those countries having the highest happiness index in the world, with their GDP per capita about 1.5 to 2.0 times higher than that of Japan. After the Oil Crisis, Denmark became one of the quickest countries in Europe to launch its denuclearization policy in 1985, following nationwide debate. Today, Denmark is the most advanced natural energy nation and aims to achieve 100% renewable energy in 2050. On the contrary, Japan did not fully learn from the significance of the "war defeat" in 1945. Instead, it has become "the subcontracting empire" (words of Naoki Sakai) of the United States to enjoy being a "wealthy nation," using Asian countries as its springboard. As the United States weakens, however, Japan seems to be heading toward its downfall. While continuously decreasing its educational budget to the lowest level among OECD countries, but increasing its defense budget, and adopting nuclear power plants as "base load power sources," Japan seems to be going backward in the history of the world, in comparison with the path taken by Denmark.

2   "3.11" as the Disaster of Civilization: Destiny of "Energy Colonialism"

What kind of experiences did we have on "3.11"? To what "depth" can we contemplate this question today? The future will probably determine the destiny of this nation.

Takeshi Umehara (1925–2019) called this "3.11" the "disaster of civilization." Certainly, if there had been no such unprecedented scale of quake and tsunami, and if TEPCO had not failed to introduce countermeasures, and if the past administrations of Japan, an earthquake prone nation, had not actively promoted nuclear power development, so many thousands of people would not have lost their homes. In that sense, "3.11" was a "natural disaster" and a "man-made disaster." As Umehara argued, however, it was possible to contemplate "3.11" from the viewpoint of questioning Japan's modernization in the past 150 years since the Meiji Restoration.[2]

First of all, why were the nuclear power plants to supply electricity to Tokyo built in Fukushima and Niigata? That was the fundamental question. Ever since the Meiji era, the positionings of local communities were to supply labor, food, and energy resources to Tokyo. In view of national "energy security," the national policy to construct nuclear power plants was directed mainly toward local communities, which were forced to remain in a state of under-development. This meant the simple transfer of any "risks" embodied in such policy to local communities and future generations. In other words, the processes to modernize Japan toward becoming a "rich nation" were to create the "structural sufferings," in which the logics of centralism and "maximum happiness of the largest majority" (utilitarianism) pursued by a handful of policy-making elites forced the "peripherals" to bear disadvantages and risks in order to secure the advantages and safety of "centrals".[3]

On the other hand, some people constantly raised counter arguments, stating that the money flow from Tokyo did enrich local communities. Such counter arguments themselves have constituted the core of colonialism ideology. In recent years,

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[2]This reminds us how Masao Maruyama (1914–1996) analyzed the power structure of Japan's war defeat and called it the "irresponsible system." Such a fundamentally pathological condition of Japanese society has resurfaced during "3.11," and in various measures taken as the political "treatment" of its aftermath. As the "TEPCO Fukushima Nuclear Power Plant Accident Investigation Committee" (Accident Investigation Committee of the Diet) pointed out, the hotbed of an irresponsible system, or "Nuclear Power mura (village)" still remains strong. From this perspective, the experiences of "3.11" should be remembered as the "second defeat" after the first one in 1945 for Japanese people. As they failed to pursue the "responsibilities of war" before, Japan as a nation let the responsibility of "3.11" fall into obscurity and is about to miss another chance for historical awakening amongst the excitement of the Olympic Games and EXPO.

[3]This type of structure can be found in the US Bases problem in Okinawa, where "civilian security" is threatened for the sake of "national security." This can be called "security colonialism." The same structures represent the common logic connecting "3.11" and other pollution problems in Japan, led by Minamata disease (in Niigata, it is called the "second Minamata disease").

however, the fundamental questions of how much "wealth" and "development" nuclear plants have brought to their localities have been reviewed and verified. For example, a newspaper publisher in Niigata Prefecture, where one of the largest nuclear power plants in the world is located, conducted its own survey of the plant site, and concluded that the economic effects of the nuclear power plants were an unsubstantiated "myth," which was created through the policy-making history since the Meiji Era to determine Niigata as the power source of the metropolitan area (Niigata Nippo Press's Special Report Group to Study the Nuclear Power Plant Issue, 2017).[4]

In the past, nuclear power was the most advanced science and technology, and the symbol of a "prosperous future." However, it has been revealed already that such notion stemmed from President Eisenhower's Declaration of "Atoms for Peace" (1953), and behind such notion was another imperialistic logic for the removal of the Japanese people's "nuclear allergy," and the political use of nuclear weapons (nuclear technologies) in the Cold War world. Until the tragedy of "3.11" occurred, the multi-layered logic of the so-called "energy colonialism" remained consistently at the back of many historical contexts.[5]

3 What Is "Energy Democracy": Frontier of the Theory of Democracy

Energy is like the "blood" of modern civilization. Thus, the way of energy determines the way of society itself. In his book "Carbon Democracy," Timothy Mitchel (1955-) pointed out an interesting argument that, during the time when coal was the basic energy source, coal mine laborers were controlling the coal production volume and demanding collectively for their basic rights. They and their collective demands were the ones that built the very foundation of todays' democracies. Later, however, when the age of petroleum began in the world, the energy supply systems were

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[4]Undoubtedly, the finance of the municipality where the nuclear power plant is located has been highly dependent on the nuclear power plant, due to the subsidy system of "3 laws concerning electric power sources" and other systems. For example, in the case of Kariha Village where Kashiwazaki Kariha Nuclear Power Plant is located, about 70% or more of its fiscal revenue is related to nuclear power plants. However, they have begun to review its long-time costs, in consideration of the degree of distortion such subsidies have brought to the municipal finance, and the possible obstruction of its autonomy.

[5]"Energy colonialism" is a new idiom I created to express comprehensively the relationship between ruler and ruled through energy, and it has not been fully developed as a concept. This concept not only signifies the exploitation of energy resources in 'peripherals' by 'centrals,' but also implies the centrals' political ruling of 'peripherals' using energy resources and technologies. In relation to this, I have been thinking for some time that, to understand the relationship between the US and its allies in East Asia regarding nuclear energy, it is necessary to have the viewpoint of comprehensive "Atom-Politics" including nuclear weapons (military use), in addition to the viewpoint of nuclear power generation ("peacetime" use).

transformed, separating production sites and consumption sites by great distances and connecting them with gigantic and long-distance pipelines. Such systems made it extremely difficult for laborers to form united fronts in their movements, which then undermined democracy. According to Mitchell, the development of the oil industry did embrace, from the very beginning, certain political intentions to suppress labor movements, which was quite powerful and strong at that time (Mitchell, 2011).

Such notion of energy systems used in a society having decisive influences over the way of democracy has drawn much attention today. Based on such materialistic understandings of a society, what types of social systems will nuclear energy create?

As Robert Jungk (1913–1994) pointed out in the past, what this gigantic technology called nuclear power generation brings intrinsically is experts' control and secrecy, in other words, anti-democratic society. Especially because nuclear technologies have deep correlations with the history of nuclear weapon development, they can bring, with stealth, not only bureaucracy but also the pathological theory of militarism into a society (Jungk, 1989).

In fact, East Asian countries adopted national policies to introduce nuclear power generation technologies during the Cold War, and the western nations, starting from Japan under multiple authoritarian regimes, did the same, while secretly reviewing the possibility of nuclear weapon development. From such perspectives, it seemed quite natural to find many instances of the nuclear power issue becoming the subject of political confrontations in the processes of democratizing the authoritarian regimes. The above considerations seemed to indicate the possibility of "energy transition" from nuclear energy to renewable energies bringing significant transformations of such a "nuclear power type society" that inevitably accompanied centralization and regional divisions.

The "energy democracy" concept represents a framework to consider the possibilities of energy transformation democratizing a society, or democratization of a society bringing energy transition. The concept was developed through the movements and practices of energy transitions mainly in Europe (Iida, 2000), which further evolved academically in recent years. For example, Kacper Szulecki argued that this concept indicated a prescriptive goal of decarbonization and energy transition, while representing the actual cases of citizens' participation in decentralized bottom-up policy-making of the energy sector. He contemplated what "democratic" energy meant, and why energy democracy would be desirable, not only from the ethical point of view, but also from a more practical perspective (Szulecki, 2018).[6]

Certainly, as exemplified in the case of China that is the world's biggest promoter of natural energies today, energy transition and "democracy" as the governing regime would not necessarily be mutually harmonic. Renewable energies such as

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[6]He paid special attention to the concept of "the prosumer-citizen," which is the hybrid of "consumer" and "producer." In the coming democratic energy society, citizens are not only the consumers of energy, but also the active participants in the decision-making processes of energy policies, and become the owners of production methods themselves.

solar, wind, and biomass, however, are more dispersed energies obtainable everywhere on the Earth, in comparison with fossil fuels that are unevenly concentrated in specific areas. Therefore, the production and management of renewable energies have greater affinity with decentralized systems. The assumption that a social system focusing on renewable energies can create a more decentralized system based on autonomies of local communities may need further verification in the future. By introducing a new perspective of "energy," however, the "energy democracy" concept may broaden the horizons of democracy theories, which used to be addressed within the framework of various political institutions, bringing a new democracy concept that incorporates more comprehensive and practical issues, mainly consisting of "technologies and democracy," "economic activities and democracy," and "Nature (or ecology) and democracy".

In order to find effective solutions to salvage liberal democracy in global crises today, we need to reestablish various social conditions that can conform to democracy, in other words "the basic foundation of democracy".[7] And the implementation of such efforts has already started from local communities.

4   Establishment of "Autonomy" for the "Safety" of Local Regions: Gubernatorial Election of Niigata Prefecture in 2016 and Nuclear Power Verification Committee

On October 16, 2016, the "conservative kingdom" of Niigata Prefecture saw the election of a liberal governor for the first time in its history. The biggest issue in this election was the resumption of the operation of TEPCO's Kashiwazaki Kariha Nuclear Power Plants. Back in 1996, the town of Maki in Niigata implemented a referendum on a political issue for the first time in Japan, and rejected the Tohoku Electric Power Companies' plan to construct the Maki Nuclear Power Plant. Just

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[7]Many have indicated already, how the footsteps of "fascism" and exclusivism, and militarism are taking hold again in the world, while "the space for citizens' society" has shrunk. At the same time, the global liberal economy has not contained such political disintegration and crises; rather it has surely encouraged them. (Benjamin Paper, "Jihad vs. Mac World – Has the dream of citizens' society finished?" translation by Chikara Suzuki, Mita Publisher Co., 1997) Today, the near-sighted egoistic logic of "now only, money only, and oneself only," like "(something) first!," is prevailing in the world, overwhelming the voice for "global governance" and "global justice." As a result, regional conflicts and economic gaps ignored by the international community, as well as endless destruction of the global environment are creating a hotbed of naked violence, that may lead to the resumption of terrorism, and even embrace the possibility of nuclear war. Against such "worldwide civil war" going on like automatic machines, and the global exacerbating cycle of destruction, how can we respond? Although there have been some attempts to solve issues from more comprehensive viewpoints across the borders of individual issues in recent years, such as "sustainable development goals (SDGs)," the crisis we are facing now seems to be a difficult one to overcome by short-term individualistic responses. It is actually the crisis stemming from the modern world system and has to be contemplated from the viewpoint of "civilization" theory.

20 years later in the gubernatorial election, many voters across "conservative and liberal" political parties voted against the (operation restart of) nuclear power plant.

As seen in the cases of US Base problems in Okinawa, the politics concerning the "safety" of local communities frequently result in confrontation between the logic to "save" lives and livelihoods of residents and the logic of central government. In other words, such issue takes the shape of "local conservatives vs. conservatives of central government."

Especially since "3.11," the residents of nuclear power plant sites have recognized the risks surrounding such plants as the issue concerning the fundamental values of their lives and livelihoods, in other words, as the issue of their "security."[8] Moreover, the thousands of evacuees that evacuated to Niigata Prefecture from the disaster struck areas after "3.11" further made Niigata voters realize the risks of nuclear power accidents.

The independent gubernatorial candidate (Ryuichi Yoneyama), who was almost unknown to Niigata voters at that time, had a landslide victory earning 60,000+ more votes over the opponents, even without the assistance of the most powerful constitutionalism party at that time, called the Democratic Party, as well as the Japanese Trade Union Confederation. Behind his victory was the presence of the "risk politics" mechanism, as well as the strategic effects of the coalition between citizens and opposition parties. While the ruling party stressed the "connection pipe to central government," the opposition parties employed the slogan of "Responsible for the future – not a governor edging toward ruling power, but a governor with more compassion for the residents," as printed on their public election leaflets.

Immediately before the gubernatorial election, the House of Councilors had an election in July of the same year with the main issues being "National Security legislation" and "TPP" membership, and Yuko Mori won the seat with the support of another coalition between citizens and opposition parties. This result and the result of the gubernatorial election of Niigata Prefecture sent strong messages of objections from local governments to the policies of the central government over the issue of "safety.".

Although the newly formed Yoneyama administration of Niigata Prefecture lasted only about one year and a half, his policies continued to be borne by the

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[8] Recent studies of national security indicate that there is actually a limit in the traditional assumption of national security, which assumes that "a nation (national government) is to protect national interests and the safety of its nationals using military methods against any military threats from potentially hostile nation(s). Nowadays, the "threats" assumed in national security policies have to include not only military threats like terrorism, but also various subjects including non-military threats like economic crises, diseases, refugees, crimes, and natural disasters. Moreover, it becomes necessary to have fundamental reviews of the purposes, executing entities, and methods of national security, as well as a simple review of the diversification of the threat contents.

Actually, the "3.11" nuclear accidents were a severe crisis threatening the national security of Japan itself, which reminded the world that military methods alone cannot recover "safety" nor provide security. In regards to the new theme of "security of local community," refer to Akio Igarashi/Hiroshi Sasaki / Seizo Fukuyama editors and authors "Security of Local Municipalities" (Akashi Shote, 2010).
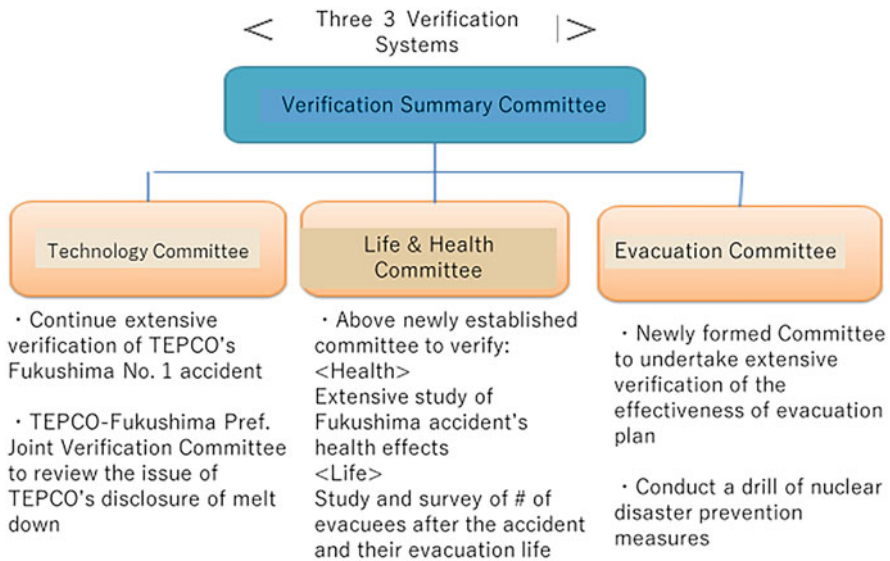
Fig. 1 Diagram of Niigata Prefecture Nuclear Power Plant Verification Committee (Prepared by author)

next conservative governor, who realized the establishment of the "Niigata Prefecture Nuclear Power Verification Committee" (hereinafter called the "Verification Committee"). After the so-called "Governmental Investigation Committee" and "Investigation Committee of the Diet" to investigate the "3.11" accident, Japan did not find any serious efforts to investigate and verify the safety of nuclear power plants. So, Niigata's attempt to verify independently (using their own budget) the nuclear power safety from extremely comprehensive viewpoints was epoch-making in the history of local governments' nuclear power administration.

The Verification Committee undertook three different but comprehensive verifications of nuclear powers, including: "verification of the causes of the Fukushima No. 1 Nuclear Power Plants' accidents"; "verification of the effects of nuclear accidents on human health and life"; and "verification of safe evacuation methods in the case of a nuclear accident." Then the "Verification Summary Committee" (chaired by Satoru Ikeuchi) summarized the results of the verifications (Refer to the Fig. 1 below).

Ultimately, the Verification Committee took on the role of providing the basic reasons for determining whether or not the governor was to permit the resumption of nuclear power plant operation. Moreover, the very processes of cross-cutting multidisciplinary discussion involving many experts and Niigata citizens embraced the true significance of realizing the "democracy of mature discussion" for nuclear power generation, even more so than their "conclusions" (Sasaki, 2017).

The challenge of the Verification Committee was also an attempt to have autonomous understandings of the issues of safety and risks among entities as

comprehensive as possible, including future generations, and to let them participate in policy-making. Such challenge could be called a practical example of a radical democracy (ecological democracy), under which "every entity that is affected by policy risks must be given an opportunity to participate in policy-making" (Echersley, 2010).

5 Challenge of "Community Power": Toward a "Regionally Dispersed Networking Society"

To rebuild the "bottom structure of democracy", greater potential emerging from local communities can be found in "Community Power (local energy)." To explore regional development through renewable energy, more than 300 of such "Community Powers", big and small, exist in Japan already. These "Community Powers" are going beyond the conventional "anti-nuclear" movements and attempting by citizens themselves to create basic economic and social conditions for overcoming global warming, and undertaking "avoid nuclear" and "graduate from nuclear" activities. They are to optimize the use of natural energies in local regions, to pursue local consumption of locally produced products, and to promote the development of "locally owned and locally produced" energy resources, in order to create a circular system to have the funds and jobs that have been flowing from local regions to metropolitan areas flow back to local regions. In Niigata, the "General Incorporated Association Oratte Niigata Citizens Energy Council" was established in 2014.[9] A part of their "Prospectus" is shown below:

> By practicing this "Citizens' Energy," we shall create a new flow of jobs and assets in the region and promote the spontaneous development of the region. Gradually changing the current economic and social structures that tend to converge the flows of human resources, material goods, and monetary funds to the center, we promote the efforts to transform local regions to become a truly independent and autonomous community. This 21st Century is the time when the limit of the centralizing system has surfaced all over the world, and when the voices demanding true decentralism and regional autonomy have been heard. For local regions to regain real energy, not only the central government, but also the locals themselves need to work creatively, and accumulate actual practices for autonomy. Furthermore, by mutually sharing these regional practices, it will become possible to create a resilient and substantial economic and social foundation for this country. (http://www.oratte.org/about/).

The practices of creating a resilient regional economy and real democracy through regional "energy autonomy" can be learned from the advanced experiences in

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[9]Local energy group, with myself as Representative Director (http://www.oratte.org/). As of the Year 2019, it operates solar power plants at 40 locations in Niigata Prefecture (overall power generation volume: 2000 kW/h) under its subsidiary companies called "Oratte Civic Energy Co." (established in 2015) and "Oratte Civic Solar Co." (established in 2017). We have entered into partnership agreements with Niigata City and Murakami City to cooperate in their environmental education, and in partnership with the Pal System Consumer Cooperative aiming to realize the merging of food (agriculture) and energy, and local produce and local consumption systems.

Denmark, Germany, and other countries.[10] The origin of "Community Power" is the self-realization of fundamental problems, i.e., how a centralized energy system, led by nuclear power generation, resulted in the outflows of wealth and potentials of regional communities, bringing further division of local regions. The "Community Powers" certainly need to address the risks of nuclear power plants themselves, but they also need to aim for the transformation of such a "nuclear power society" and the realization of a new decentralized society based on regional autonomy.

To practice such "Community Powers," citizens actually need to create a new relationship with local financial institutions and administrations, while establishing their own corporations to supply basic utilities including electricity and thermal energy, and creating new jobs and industries in cooperation with agricultural, forestry, tourism and other sectors.

In other words, citizens need to depart from the position of being mere consumers, and to become real producers of the local community. If numerous "Community Powers" deploy such comprehensive practices, and promote autonomy and independence of local regions, that will bring the opportunities to internally break free from the conventional so-called "centralized society dividing local communities" or "energy colonialism." Citizens will not only remain as actors in the public and political sphere to confront central (national) government, but will also become the actors and drivers of (civilization) transformation to create a new social system in more comprehensive areas, in cooperation with various other actors of wide-ranging sectors, including existing local administration, businesses and economies, finances, and the natural environment. In short, they will become the true bearers of civilization transformation.

In modern society, the basic elements essential for people's lives and livelihoods, such as Safety, Food (agriculture), Energy, Care (welfare), and Education, are presumed to be provided by people's nations, in general, and such presumption seemed to have worked to a certain extent.

However, such dependency on nations for people's lives and livelihoods (actually derived from the wars of modern days) can provide a hotbed of excessive nationalism and totalitarian regimes (Arendt, 1981), and may no longer function as an actual presumption in this age of globalization with weakening of the governance structure.

A new society of "Community Powers" is a "regionally dispersed networking society," which will not deny the existing political communities themselves, such as nations, but realize bottom-up type decision-making processes to be incorporated into the existing political structures, through the networks where local communities self-govern at will.[11] In fact, centralized systems frequently show their

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[10] For details of the energy transition (Energiewende) in Germany and the roles of citizens, refer to: Craig Morris & Arne Jungjohann, Energy Democracy: Germany's ENERGIEWENDE to Renewables, Palgrave Macmillan, 2016.

[11] This is a society based on the principle of subsidiarity. This principle originated from Aristotle and Catholicism. It is an organizational principle, and upon the referendum in Denmark and others, it is clearly incorporated into the EU's Treaty of Maastricht. This principle is based on the concept that various social problems should be addressed at local levels that are the most appropriate for

vulnerabilities in crises and disasters, as seen in the case of mass black-outs. In the age of a "Global Risk Society" (Ulrich Beck), the realistic option to protect people's lives and livelihoods and to make them more sustainable can be one of taking the path toward a "regionally dispersed network society," in which numerous empowered communities will form the foundation of multi-dimensional, multi-layered, and mutually assisted networks.

6 Conclusion: Toward "East Asian Natural Energy Communities"

The path toward decolonization proposed by Uchimura in the past was the path toward internal development by the use of natural energies. On reflection, however, East Asia where Japan is located has become a "Nuclear Region" where nuclear weapons and nuclear power plants have concentrated ever since the time of the Cold War. And behind such situation lays the history of "colonialism" piled up in many layers. Since the 1960s East Asian countries have profited by unprecedented growths of economies, which are sometimes called a "miracle." At the same time, there are still remnants of negative legacies arisen from the authoritarian regimes that nest in the politics to emphasize development.

On the other hand, such historical facts may indicate the possibilities for the regional political structures to undergo major transformation through energy transition.[12]

Lastly, I would like to talk about the dream of the "East Asian Natural Energy Community." It is a scheme of cosmopolitan energy transition to be realized across the borders for future generations.

In Taiwan and Korea, which have an advanced "energy democracy," their new administrations have already implemented various practices to promote energy transitions through cooperation between governments and citizens. Moreover, the mutual exchanges of such experiences are deepening further across national borders. The world's largest nation to promote renewable energy, China, also places energy transition as their highest priority, in view of the ever-exacerbating air pollution. In addition to such "realistic" needs in the energy policies of various countries, there is another definite reality that countries like those in East Asia have to face as a "risk-share community," for any severe accidents occurring in any nuclear power plants of

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finding solutions and are closest to such problems. In other words, the issues for upper organizations (such as nations) to address should be limited to those issues, which individuals or local communities cannot address.

[12] In this context, the abolition of nuclear weapons, which is probably the most ardent wish in East Asia needs to coordinate with the movement of "energy transition" in East Asia. Further dialogue between the so-called "anti-nuclear movements" and "denuclearization movements" is required.

any country can cause serious damage to neighboring countries depending on the wind direction.

At present, East Asian countries seem to find historical problems and trade disputes obstructing the efforts to improve their relationships through negotiation. What is required now is to seek a path that explores the necessary conditions to generate the "co-existence" of East Asian countries, by sharing common awareness in safety and risks. (Sasaki, 2006) It is necessary to develop flexible international schemes, by accumulating multi-track efforts for mutual cooperation and trust building on common themes, such as pollution measures and joint development of energies, rather than the more contentious subjects of military security and territorial disputes.

The origin of the European Commission was the European Coal and Steel Community (ECSC). If we are to establish an East Asian Peace Community in the future, it can start from some type of energy community. The concept of civil societies building an "East Asian Natural Energy Community" across national borders from the very bottom in the "nuclear region" of East Asia is also the concept for building permanent peace in East Asia.

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