

INDEX

A

- Aboriginal and Torres Strait Islander, 13, 14
- Acid rain, 191, 196, 203, 204
- Acrylonitrile butadiene styrene (ABS), 184
- Advanced processing unit (APU), 20, 180, 181, 184–191, 194, 196–200, 202, 204, 205, 208, 210, 212, 213, 216, 217, 220–225, 227–229
- Aesthetic, 17, 31, 35, 48–52, 55, 64, 65, 67
- Application programming interface (API/APIs), 142, 166

B

- Ball-grid array, 186, 223
- Battery/batteries, 139, 140, 151, 155, 202, 206, 220, 226, 227
- Bioaccumulation/
bioaccumulate, 21, 217

C

- Capitalism, 9, 11, 12, 15, 36, 45, 62, 73, 75, 136, 137, 238, 239
- Carbon neutral/carbon neutrality, 5, 18, 19, 80, 82, 84, 90, 99–103, 106, 108–112, 118, 119, 124, 125, 134, 135, 137, 139, 141, 143, 144, 159, 168, 169, 175, 193, 229–231, 237–243, 245–247
- Carbon price/carbon fee, 111, 118, 156, 157
- Carcinogen/carcinogenic, 179, 200, 209, 223
- Certification, 101, 112, 126
See also Gone gold
- Charging/charge/charger, 16, 95–97, 155, 156
- Chip, 4, 155, 180, 184–186, 190, 191, 196, 198, 200
- Circuit board (PCB), 181, 194, 198, 212, 213, 216, 223
- Climate action, 3, 6, 9, 22, 27, 33, 36, 42, 61, 62, 94, 101, 239

Climate ascetism, 150, 167
 Climate communication, 16, 31, 35,
 42, 46, 47, 51, 53, 61
 Climate justice, 12, 137, 172
See also Just transition
 Climate sceptic, 53, 61, 82
 CO², 7, 18, 27, 30, 37, 77, 97,
 102–104, 107, 110, 112, 113,
 116–118, 127, 128, 132–134,
 138, 154, 156–158, 161, 174,
 181, 184, 190, 193, 195, 199,
 207, 209, 215, 225–227, 238
 Code, 37, 63, 78, 79, 125, 169, 180
 Computation, 5, 160, 164, 165,
 180, 183
 Console, 4, 12, 18, 20, 21, 80, 84,
 102, 103, 107, 110–112, 118,
 125–128, 134, 137, 138, 149,
 151–161, 163, 167–170,
 173–175, 179, 181, 184–187,
 190, 194, 199, 205, 208, 213,
 222, 229, 230, 238,
 239, 242–244
 Constraints, 3, 4, 54, 55, 150, 163,
 165, 167, 168, 171, 173
 Contamination, 21, 81, 187, 196,
 203, 204, 215
 Content delivery network (CDN/
 CDNs), 123, 138

D

Data center, 81, 84, 100, 104, 105,
 107, 109–111, 117, 123, 125,
 142, 143, 243
 Decarbonize/decarbonization, 4, 9,
 19–22, 50, 58, 97, 105, 118,
 119, 125, 131, 135, 141, 143,
 145, 149, 151, 164, 175,
 229, 237–242
 Demoscene, 169

Developers, 4, 18–21, 39, 46, 48, 61,
 63, 64, 68, 73, 74, 82, 84, 89–100,
 102, 103, 106, 111, 114–119,
 126, 137, 145, 149, 150, 152,
 156, 159, 162, 163, 166–169,
 173, 185, 239–242, 244–246
 Digital games, 1, 2, 4, 12, 20, 31, 36,
 42, 75, 78, 83, 89, 105, 107,
 118, 136, 141, 143, 145, 180,
 231, 239
 Digitization, 105, 137, 144
 Discs, 6, 18, 19, 83, 84, 90, 119,
 123–137, 141, 144, 145, 157,
 167, 174, 238, 239, 241, 243, 245
 Distribution, 18, 19, 32, 68, 84, 93,
 105, 112, 117, 123–145, 150,
 174, 239, 242
 Diversity, 15, 41, 47, 89, 99, 150, 189
 Dynamics, 17, 31, 32, 48, 51, 52, 62,
 63, 65–76, 83, 124, 128,
 141, 164–167

E

Ecological game, 17, 18, 57, 61–85,
 97, 119, 145, 162, 173, 237, 241
 Ecological thought, the, 10, 16, 76,
 77, 79, 80, 83
 Ecology, 13, 36, 38, 42, 67, 81
 Electronic Arts (EA), 101,
 104–106, 116
 Emergence, 17, 63–66, 75, 83
 Emissions factor/emissions factors, 91,
 94, 97, 104, 113, 132, 133, 135,
 138, 141, 151, 152, 154, 156,
 158, 159
 Emissions intensity, 5, 18, 20, 80, 91,
 94, 97, 102, 105–109, 111,
 113–119, 126, 129, 143, 144,
 150, 160, 165, 166, 175, 195, 199
 End-of-life, 6, 179, 194, 196, 229

Energy efficiency, 138, 139, 144, 149,
150, 159–163, 172, 174, 182, 243
See also Jevons paradox
Energy intensity, 6, 20, 78, 84, 90, 98,
125, 142, 143, 163, 166, 172,
203, 209, 215, 223, 226
Environmental storytelling, 17,
65, 66, 83
E-waste, 20, 78, 179, 183, 206, 215,
221, 230, 239
Extraction, 10, 21, 174, 180, 182,
190, 202, 215, 219

F

Film and TV production
emissions, 116
First-person shooter (FPS), 48, 81
Flights, 90, 96, 100, 102, 103, 113,
117, 130, 133
Foxconn, 107, 108, 111
Freight, 65, 126, 129, 130, 133, 134

G

Game design, 4, 20, 28, 64, 75, 82,
163, 165, 167, 171, 174
Game Developers Conference (GDC),
63, 93, 97, 118
Games for change, 3, 29, 31, 35,
39–42, 55
Gamification, 35, 36
Gone gold, 132
See also Certification
Greenhouse Gas Protocol (GHG
Protocol), 91, 95, 100, 107, 113

H

Harms, 3, 5, 17, 18, 20, 38, 62, 78,
81, 82, 84, 85, 107, 131, 166,
175, 179–181, 190, 191, 193,

194, 197, 199, 203, 217, 220,
225, 228–230, 238, 239
Health, 29, 70, 183, 200, 201,
210–212, 221, 223, 224,
226, 230
Heat, 1, 27, 38, 39, 84, 141, 186,
193, 194, 201, 224
Heavy metals, 6, 21, 179, 203, 209,
216, 217, 219, 220, 223, 224,
226, 228, 229

I

Ideological critique, 31, 42, 45,
47, 48, 51
Ideology, 16, 29, 31, 40,
42–48, 52, 80
Inductively coupled plasma mass
spectrometry (ICP-MS), 3, 20,
187, 189, 191, 199, 221, 229
Infrastructure, 4, 19, 123, 125, 129,
136, 138, 141, 142, 144, 163,
183, 203
Investment, 22, 74, 75, 106, 110,
118, 141, 174

J

Jevons paradox, 161
Journalist(s), 4, 20, 22, 64, 85, 179,
181–183, 239, 240, 244,
245, 247
Just transition, 22, 137, 145, 172

L

Ladder of technological progress,
17, 62, 74
Landfill, 6, 21, 127, 139, 174, 222,
227, 237, 241, 243
Lifecycle assessment (LCA), 19, 112,
124, 135, 144, 214, 227

Logistics/logistical, 4, 77, 124, 126,
129, 134, 206, 239
See also Supply chain/supply chains

M

Manufacturing, 18, 20, 21, 100, 107,
108, 111–113, 117, 124, 126,
128, 129, 131, 132, 134, 164,
168, 175, 179–182, 186, 189,
193–197, 199, 201, 208, 209,
212, 213, 216, 226, 229, 239,
242, 243
Mastery of nature, 75
Materiality, 5, 37, 41, 84, 179
Mechanics, 30, 32, 34, 36, 50–52, 55,
62, 66–68, 70, 78, 169
Metals, 6, 21, 74, 77, 179, 180, 183,
184, 189–191, 193–217, 219,
220, 222–226, 228, 229
Microsoft, 18, 101, 107, 110–113,
131, 136, 150, 160, 230, 243
Mining, 3, 20, 72, 73, 179, 180, 190,
192, 193, 196, 198, 199, 201,
203, 204, 206, 209, 210, 212,
214, 215, 217–219,
223–229, 239
Mobile game, 92, 98, 99, 103, 157

N

Nintendo, 18, 101, 107, 108, 110,
111, 113, 116, 123, 136, 150,
153, 169, 170, 243

O

Obsolescence, 4, 84, 182
Offset/offsetting, 19, 21, 85, 92, 94,
96, 98–103, 110, 111, 118, 128,
129, 144, 149, 150, 152,
154–157, 159, 162, 168, 173,
230, 241

Ore/ores, 196, 199, 200, 202, 207,
209, 210, 214, 217, 222,
223, 228

P

Paper, 7, 67, 84, 90, 99, 123,
126–128, 140, 187, 190
Patch/patches, 74, 144
Personal computer (PC/PCs), 1, 103,
110, 118, 136, 151, 158, 159,
173, 186, 243
Persuasion, 17, 30, 35, 42, 43, 48,
52, 61, 237
Photorealistic, 174
See also Realism
Plastic/plastics, 5, 19, 77, 84, 90,
101, 123, 131, 135, 136, 139,
144, 179, 183, 184, 191, 196,
220, 221, 237, 241, 243
Platform holders, 20, 21, 102,
107–113, 136, 137, 142, 150,
155, 240, 242–244
Players, 4, 27, 61, 89, 123, 149, 237
Playing for the Planet, 101, 103, 246
PlayStation (PS3, PS4, PS5), 3, 4,
19–21, 108, 109, 124, 126–136,
138, 149, 152, 153, 156–160,
173, 174, 180–187, 190, 191,
194, 196–202, 204, 205, 208,
210–213, 215–217, 219–222,
224, 225, 227–229
Policy/policymakers, 33, 56, 93, 99,
139, 180, 192, 239, 246
Polycarbonate, 84, 123, 127
Polypropylene, 127
Power consumption, 18, 80, 96, 138,
142, 144, 149, 151, 153–158,
160, 172, 182, 245
Power draw, 149, 151, 155, 156, 162
Power purchase agreement/power
purchase agreements, 99, 106,
109, 110

Procedural rhetoric, 30, 55
 Publisher/publishing, 89, 103,
 107–113, 118, 125, 126, 145,
 163, 173, 240, 242–244

R

Realism, 44, 64, 69, 75
 Recycling, 6, 101, 106, 127, 196,
 204, 206, 207, 210, 212, 215,
 221–223, 227, 229, 239
 Refining, 20, 180, 190, 193–195,
 199, 201–204, 209, 214, 222,
 225, 227
 Regulation, 18, 100, 160, 204, 229,
 243, 244
 Renewable/renewables, 3, 21, 22,
 49–52, 85, 94, 99, 102–110,
 118, 119, 125, 129, 135, 136,
 139–141, 143, 145, 151,
 162–167, 171, 172, 174, 193,
 195, 204, 241, 242, 244, 245
 Resolution scaling, 166

S

Scarcity, 16, 34, 50, 73, 150, 163
 Scenarios, 16, 30, 34, 48, 50, 63, 65,
 124, 125, 128, 129, 131, 132,
 135, 136, 138, 139, 141, 144,
 163, 164, 171, 173, 174, 183
 Semiconductor, 170, 181, 182, 184,
 189, 197, 199, 201, 202, 208,
 210, 211, 220, 222, 228, 229
 Servers, 37, 77, 90, 116, 123, 136,
 142, 239, 241
 Shrink-wrap/shrink-wrapped, 131, 134
 Simulation fever, 30, 43, 47, 49, 50, 52
 Situated gaming, 41
 Smartphones (phones, iphone), 6,
 136, 151, 153–157, 172, 173,
 179, 181, 182, 187, 206, 207,
 210, 222

Solid-waste burden (SWB), 21, 190,
 214, 215, 223, 229
 Sony, 18, 80, 101, 107–111, 113,
 126, 129–131, 136, 160, 243
 Space Ape Games, 92, 98–100, 103,
 113, 119, 149, 150, 152–155,
 159, 173
 Standby, 112, 152
 Steam, 45, 49, 68, 74, 75, 123,
 136, 137
 Streamers, 4, 22, 245
 Sulphur dioxide (SO₂), 191, 203
See also Acid rain
 Supply chain/supply chains, 2, 5, 131,
 134, 175, 197, 220, 243

T

Time-of-use, 149, 157
 Transistor/transistors, 170, 180, 189,
 192, 199, 200, 205, 208–210,
 216, 220
 Transport, 19, 77, 100, 113, 125,
 126, 128–131, 133, 135, 141,
 180, 206, 208, 214
 Triple-A/Triple A, 47, 63, 98,
 101–106, 115, 159, 172, 173

U

Union/unionized, 240, 244
 Upgrade culture, 18
See also Obsolescence
 User experience (UX), 34, 173

V

Virtual reality (VR), 158

W

Waste, 1, 18–20, 38, 39, 76, 77, 82,
 84, 99, 135, 139, 144, 179, 180,

- 182, 196, 198, 200, 207–210,
214, 218, 223, 227, 229,
241, 243
- Water, 49, 64, 65, 68, 70, 71, 96,
104, 187, 192, 193, 196, 207,
218, 219, 225–227
- Waterways, 181, 211
- Workers, 2, 22, 95, 107, 114–116,
118, 145, 183, 201, 206, 215,
218, 223, 239, 240, 244
- X**
- Xbox, 110–112, 123, 152, 168, 229