accelerating transitions, 4, 21	coalition, 18, 96, 148
actors, 7, 18–27, 29–31, 38, 42–44, 54–57, 60–66,	co-evolution, 20, 176
81–82, 92–93, 98, 100, 102–103, 107,	comprehensive security, 25, 102–103
109–110, 115, 124, 131, 139, 147, 150, 158,	conflict, 2, 7, 25, 32, 42, 48, 59, 73, 80–81, 88–89,
166, 176, 185	114, 166–167, 172
administration, 11, 61, 82–83, 101–103, 105, 109,	consensus, 65, 79, 87–88, 90, 93, 98, 152, 157, 167,
111, 113–114, 118, 145, 153, 156, 168	176, 181, 183
administrative, 7, 20, 59–60, 62, 73, 80, 82, 107,	Copenhagen School, 26–27, 32, 169–170
114, 124, 130, 144, 165–166, 168	Crimea, 49, 77, 86, 96, 109–110, 129, 181
adverse sovereignty, 137, 139	crisis, 26, 38, 45–47, 70, 83–84, 87, 90–91, 96,
Arctic, 57, 104, 106, 127, 129, 149, 151	104–105, 108–109, 114–115, 121, 136, 144,
armed conflict, 4, 31, 42, 49	147, 152
umed connect, 1, 31, 12, 19	critical infrastructure, 84, 135, 137, 171
Baltic, 2, 8–9, 46, 49–50, 69–70, 77, 79, 81, 84,	critical materials, 2, 41, 43, 45, 85, 92, 112, 114,
90–91	118, 132, 155, 161–162, 168, 172, 179
Baltic connector, 70, 174	critical minerals, 84, 119, 155, 160, 174, 179
Belize, 149	"Critical Minerals Strategy," 149, 155, 167
bioenergy, 94, 97, 114	cultural, 18–20, 22–33, 37, 43, 47, 54, 56, 62, 65,
biofuel, 23, 75, 97	78–79, 95, 100, 102, 106, 108, 134, 151,
Booth, Ken, 6, 29–30, 139	182
border, 8–9, 40–41, 69, 76, 85–86, 92, 95, 104,	cybersecurity, 2, 11, 77–78, 81, 92, 108, 127, 130,
106, 113, 117, 122, 127, 135, 151	150, 171, 173
Britain, 146, 149–150	100, 171, 170
	dealignment, 20
Canada, 149	decarbonization, 2, 4, 7, 36–37, 40–41, 46, 50–51,
capacity, 1–2, 30–31, 44, 49, 81, 88, 90, 97–98, 102,	76, 80, 82, 85, 87, 93, 97, 111–112, 117,
123, 125, 130, 132, 143, 152, 154	132, 141, 144–145, 154, 178
carbon dioxide, 133, 141, 166	defence forces, 77
Cherp, Aleh, 7, 25, 36–38	defence policy, 8, 13, 53, 60, 62, 77–78, 81, 102,
China, 2, 5, 42, 45, 87, 106, 114, 128, 155, 158, 172	106–107, 111, 117, 127, 141, 149–151,
citizen energy ownership, prosumer, 1	153, 160, 165–166, 185
"Climate and Energy Strategy," 101, 106, 111,	defence radar, 9, 118, 166
115–116	deinstitutionalization, 66, 134
climate change, 8, 13, 25–28, 34, 36–37, 40, 47,	democracy, 4, 20, 27, 43
50-51, 54, 55, 57, 60, 92, 98-100, 103-104,	Denmark, 2, 38, 49
115, 117, 128, 131, 139, 149, 151, 156, 159,	depoliticization, 28-29, 32, 118, 146, 154, 160,
161, 166, 185	169, 184
Climate Change Act, 125, 141, 144–145, 147–148	desecuritization, 9, 27–28, 102, 117, 169
climate diplomacy, 185	destabilization, 24, 33, 52, 63–64, 72, 79, 84–85,
climate policy, 11, 47, 74–75, 85–86, 96, 144, 148	92, 111–112, 132, 138, 158, 175
coal, 2, 9, 34, 70, 96, 99–100, 106, 133, 141–142,	desynchronization, 46, 72–73, 81, 84, 90–91,
144, 175	167, 172

digital technologies, 2, 45, 56, 70 Estonia, 2-3, 8-11, 13, 40, 66, 69-82, 84-94, 112, diplomacy, 47, 153, 160 127-129, 131, 135, 138, 165-166, 169, discourse, 24, 27, 110, 111, 130, 137-138, 140 171-173, 182 disruption, 20, 24, 26, 31, 36-37, 39, 41-43, 47, Estonian, 172, 176, 178, 181, 183. See Estonia 49-50, 53, 55, 64, 70, 78, 91, 95, 104, 107, EU. 3, 8, 28, 43, 49–51, 60, 69, 71, 74, 76–77. 115, 129, 134, 136, 151 80-81, 85, 87, 90, 104, 106, 110, 122, dissonance, 105, 107, 121, 139 124-125, 138, 144, 172 Dupont, Claire, 28-29 EU Green Deal, 58, 185 Europe, 1-2, 8-9, 35, 45-48, 54, 61, 70, 79-80, 90, ecological, 20, 76 92, 106, 110, 116–117, 121, 123, 125, 131, economic security, 9, 13, 36, 87, 121, 123, 125, 133, 135-138, 142, 152, 167, 185 132-133, 166, 175, 178 European, 1, 3, 5-6, 8-9, 21, 29, 33, 38, 49-50, 55, economy, 181 60-61, 69-70, 75, 81, 83, 87, 90, 94, 96, 104, Eesti Energia, 73-75, 85, 87-88, 178 108, 117, 119, 121, 123-124, 129, 133-134, electricity 136, 138, 144-146, 149, 155, 158, 168 distribution, 1, 18, 41, 107, 126, 146 European Commission, 6, 51, 60, 83, 90, 181 transmission, 1, 10, 18, 46, 73-74, 81, 91, 107, European Union. See EU 120, 123, 125, 130, 146, 178 expectations, 21, 22, 30, 32-33, 63, 65, 114, electrification, 1-3, 9, 13, 42, 44, 98, 112, 118, 123, 128, 162 125, 172-173, 178, 186 experiment, 21-23, 41 Elering, 73-74, 82, 91, 169 experimentation, 19, 23-24, 118 emissions, 36-37, 75, 82, 85, 87, 97, 115, 121, 125–126, 133, 136, 141, 166, 175, 185 far-right, 86, 88, 173 Fennovoima, 110-111 empowerment, 21-23, 46 energy crisis, 84, 122, 170, 174, 177 Finland, 2, 3, 8–11, 13, 35, 40, 66, 69–70, 72, 79, 81, 82, 90-91, 93-100, 102-106, 108-119, energy democracy, 171 energy dependence, 1, 50, 110 122, 128–130, 135, 138, 159, 165–166, 169 energy diplomacy, 185 Finlandization, 95, 106, 108, 112, 117, 182 energy efficiency, 1, 9, 59, 73, 76, 99, 109, 138, 141, Finnish, 10, 25, 49, 70, 73, 96–108, 112, 115–118, 144-147, 153-154, 156, 186 169, 176, 178, 181, 183, 185 energy elite, 74, 98, 104 fit-and-conform, 23, 175 energy independence, 8, 13, 38, 76, 85, 92, 110, 130, Floyd, Rita, 6, 25-28, 30 172-173, 175 foreign affairs, 10, 73-74, 76, 81, 102, 110, energy justice, 33, 147, 174 127-128, 130, 156-157 energy policy, 3, 7, 9–12, 29, 32, 35, 38, 40, 47, 49, foreign policy, 47, 49, 105, 127, 149–150, 152, 154, 51, 57–59, 62, 66, 69, 73–74, 76, 79–81, 87, 92, 94, 96, 99, 101-103, 105-112, 117-118, fossil fuels, 1, 9, 32, 41, 44-45, 59, 75, 93, 96, 98, 121-122, 124-127, 130-132, 137-138, 103, 105, 114, 116, 121, 123, 133, 141, 147, 140-141, 144-148, 151-155, 157, 159-162, 154, 156, 168 165-166 energy poverty, 38, 147, 154, 160, 162, 173 gas, 9, 36–38, 40, 48–50, 65, 70, 72–73, 75, 82–84, energy saving, 17, 51, 111 90, 93, 95–97, 99, 106, 111–112, 115–116, energy security, 7, 11-13, 29, 32, 35-39, 41, 43, 118-126, 128-129, 131-133, 135-136, 48-50, 75, 83, 85, 92, 100, 108, 111-112, 138–139, 141–143, 145–147, 149, 151–152, 114-116, 121, 123, 127, 129-130, 133-134,154, 160, 166, 171 138, 140, 142, 144, 147, 152-158, 161-162, Gazprom, 70 167, 174, 186 Geels, Frank, 5, 18-22, 24, 32, 52, 54-55, 64-65 energy-security nexus, 176, 178-179, 183 geopolitical/geopolitics, 2-3, 5, 7-8, 11-12, 32-36, 38-48, 51, 54, 56-58, 69, 77, 84, 89, 92-93, energy sovereignty, 137, 140, 179 energy transitions, 3-13, 18, 31, 34, 40, 42, 46, 47, 98, 103, 105, 106, 108, 110-111, 114, 51, 54, 56, 59, 63, 72, 96, 108, 112, 114, 118, 116-118, 128, 131-132, 134, 139, 152-153, 130, 139, 143, 157, 161, 165, 168, 170, 171, 155–156, 162, 166, 172, 176–177, 183–184 172, 173, 177, 178, 184 Germany, 2, 5, 47, 49–50, 112, 116–117, 122 environment, 6, 19, 21, 23, 25-26, 28-29, 36-38, Global North, 172, 184 47, 54-56, 58, 72, 77, 87, 98, 100-101, Global South, 172, 184 106-107, 133, 135, 148, 153-154, 159 governance, 6, 23, 30-31, 58, 60, 74, 77, 86, 98, environmental security, 25-26, 38-39, 54 101, 109, 146 Equinor, 123-126, 131, 138, 178 grid communities, 2, 46, 92

hard security, 77, 173, 184	military, 2-3, 5-6, 8, 25, 29, 31-33, 35-37,
health, 6, 26, 37–38, 107, 162	39-40, 54-56, 58, 77-79, 89, 104, 105, 112,
heating, 1, 9, 71, 75, 97, 100, 107, 115–116,	127–129, 131, 133–135, 137–138, 140, 143,
141, 154	149–150, 153, 155–156, 159–160, 166, 168,
Hoogensen Gjørv, Gunhild, 4, 6, 26–27, 29–30,	173, 176, 184–185
33, 77, 161, 170	military security, 2–3, 25, 31
horizontal coherence, 60, 153	Ministry of Defence, 76, 86, 88–90, 92, 102, 127,
Hungary, 49	149–150, 156, 177
hydrocarbon, 2, 7–9, 40–48, 98, 120–122, 132,	MLP, 19, 20–21, 52–53
138, 160–161, 172, 175	WIEI , 19, 20 21, 32 33
	National Grid, 146-147, 158, 161
hydrogen, 1, 7, 40, 51, 75, 112, 123,	
125–126, 143	national security, 7–9, 13, 25–27, 31, 34, 60, 62, 69,
hydropower, 9, 38, 42–44, 66, 94, 97, 119–125,	77, 81, 84–85, 88–90, 92, 109, 112, 114, 127,
129–135	131, 149, 153, 160, 173
	National Security Council, 157–158
Ida-Viru County, 79–81, 85–88, 90, 92, 175	NATO, 8, 49, 69, 77, 85–86, 108, 127, 129, 149,
incumbent, 21, 23–24, 32, 64, 66, 98, 101, 108	151, 153, 166, 173
Indigenous, 18, 47	negative security, 6, 29–33, 52–53, 63, 69, 72, 77,
industrial policy, 126	92, 96, 114, 116–117, 122, 135, 137–139,
inequality, 25	143, 158, 161, 165, 170–171
infrastructure, 8, 33, 35–36, 38, 42, 54, 81, 107,	network, 8-10, 18, 21-22, 43, 64, 73, 78, 90-92,
117, 130, 133, 136, 154, 159	102, 107–108, 116, 120, 123, 126, 134, 141,
injustice, 24, 33	146, 156, 172
innovation, 2, 5, 19, 20, 22–23, 33–34, 64–65, 94,	niche development, 22, 24, 32, 66, 72, 79, 83–84,
101, 118, 144, 155, 162	96, 111–112, 122, 131, 143, 158, 162
innovation policy, 94, 101	niche expansion, 23, 84, 92–93, 112, 120, 125, 138,
insecurity, 30–31, 86, 139, 143, 170–171	162, 165, 173, 175, 182–183
institutional change, 48, 57, 81, 93	niche innovations, 5, 20–23, 32, 52, 58, 172
institutionalization, 21, 23, 29	non-military, 25–26, 77, 149
institutionalize, 21, 23, 127	Nord Pool, 2, 46, 90, 138
institutions, 4, 19, 42, 47–48, 58, 126, 151	Nord Stream, 38, 50–51, 70, 111–112, 116, 118,
International Energy Agency (IEA), 2, 48, 119,	135, 137–138, 152, 174
151, 172	Norsk Hydro, 123, 134, 173
international relations, 6, 25, 41	Norway, 10–11, 13, 40, 44, 46, 66, 94, 97, 119–140,
Iraq, 149	143, 165–166, 169
IRENA, 3, 48	Norwegian, 9, 65, 119–128, 130–138, 140, 142,
	171, 178
Jewell, Jessica, 7, 25, 36, 37, 38	nuclear power, 3, 9, 72, 94, 97, 99, 110–112, 117,
Johnstone, Phil, 3, 5, 17, 24, 31, 32, 33, 35, 40, 47,	129, 147, 152–153, 155, 158–160, 162,
144, 145, 153, 159, 169	169, 176
justice, 2, 4	
Just Transition Commission, 143, 148, 155,	OECD, 6, 60, 75
171, 175	offshore wind, 65, 72, 73, 81, 88, 97, 113, 125, 131,
Just Transition Mechanism, 87, 171, 175	140, 158, 160, 175
just transitions, 25, 34, 87, 92, 116, 143, 148, 155,	Ofgem, 145, 178
161, 162, 171, 173, 184	oil, 8–9, 13, 32–33, 35–36, 40–41, 44, 48–49, 55,
. , . , . , . , ,	57, 65–66, 69–76, 79–88, 90–93, 96–97,
Kemp, René, 5, 19, 20, 55	99, 106, 114, 119–126, 128–133, 135–136,
Kenya, 149	138–139, 141–143, 149, 153, 160
itenju, 11)	oil shale, 8, 13, 66, 69–76, 79–88, 90–93, 166, 167,
landscape, 19–22, 32, 37, 47, 52–57, 62, 79–80,	171–172, 178
98, 103–107, 109, 117, 129, 143–144, 151,	Olkiluoto 3, 3, 97
165, 181	OPEC, 48, 119
learning, 8, 21–23, 61, 64–65, 162, 166,	organizational, 8, 18, 61, 127, 144, 157
172, 175	1'
liberalization, 48, 50, 144	parliament, 9–11, 49, 127, 145, 149
LNG, 70, 82–84, 93, 96, 111, 117, 167	parliamentary, 58, 61, 77, 109–110, 145, 149
lock-in, 58, 154	peace, 4, 6–7, 30, 33–34

peacebuilding. See peace	resilience, 31, 37, 102, 171, 174, 184–185
peat, 9, 66, 94, 96, 100, 111, 112, 114–117, 166,	reskilling, 143, 158
171, 175	resource colonialism, 172
phaseout, 8, 24, 64, 66, 72, 84, 86–87, 92,	restabilization, 182
95, 115, 122–123, 141, 157, 160, 166,	Rip, Arie, 5, 19–20, 55
171–172, 175, 182	Roe, Paul, 4, 6, 29–31
Poland, 2, 5, 49–50, 90–91	Romania, 49
policy coherence, 5, 7, 12, 21, 49, 51–53, 58–62, 72,	Rosatom, 3, 105, 110
81, 96, 109, 122, 129, 143, 157, 160, 165,	rules, 7, 19, 23–24, 33, 46–47, 56, 74
168, 185	Russia, 1, 3, 5, 8–9, 11, 21, 33, 40, 46, 48–51,
policy domains, 7, 13, 59–62, 80–81, 107, 149, 166,	54–55, 57, 69–70, 72, 76–82, 84–88, 90–96,
168, 170	98–99, 102–119, 121, 122, 127–129, 131,
policy incoherence, 7, 60, 62, 87, 107, 117, 168, 183	133, 135, 137, 143–144, 149–153, 155, 157,
policy instruments, 107, 153, 162	161–162, 166, 170
policy integration, 5, 7–8, 58, 60–61, 107, 109, 155,	
160, 165–166, 168	safety, 6, 26, 30, 97, 107, 122, 134, 151, 155, 158
policy measures, 29, 62, 80	Schot, Johan, 18–22, 32, 34, 55
policy mix(es), 20, 58–59	Scotland, 2, 3, 8–11, 13, 66, 141–143, 145–148,
policy objective, 7, 59–62, 80, 89, 168	150–152, 157–158, 160, 162, 165–166,
policy processes, 59, 80, 157	171, 175
political, 3, 6, 17–20, 26–29, 31, 34–37, 40, 46, 49,	Scottish, 9, 143, 145–148, 151–153, 155, 157–158,
54, 56–59, 61–62, 65–66, 74, 79, 82–85,	159–161
87–88, 90, 92–93, 97–98, 100–102, 105,	securitization, 4, 26–29, 32, 53, 62, 96, 111, 122,
108–110, 112, 115, 117, 125, 131–133,	138, 140, 143, 165, 169–170
137–138, 140, 146–148, 150–152, 154, 157,	security, climate, 2, 62, 103, 132, 139, 154, 156, 161
160, 162 political incoherence, 183	security, human, 2, 25–26, 30, 38, 54, 172
politicization, 28, 140, 165, 169–170	security of supply, 2, 13, 43, 45, 48, 50, 54–56, 58, 73, 81, 87–88, 90, 100, 102, 108–110,
politicize, 28, 83, 124, 130, 137	
politics, 6–7, 10, 19, 27–28, 32, 34, 40, 44, 48, 77,	115–116, 118, 120, 129, 136, 146, 154, 158, 165, 167, 174, 177, 179
86, 93, 105–106, 171	security policy, 11, 13, 29, 32, 45, 47, 50, 59, 60, 62,
pollution, 17, 34, 36, 37	76–77, 80, 93, 102–103, 105, 107, 116, 127,
populism, 34, 46, 54	130–131, 135, 149–150, 155, 165
populist, 34, 46, 77, 86, 171	security studies, 3, 5–7, 12, 18, 25–29, 32, 36–37,
positive security, 4, 6, 27, 30–33, 46, 92, 102, 114,	55, 138, 169–170, 183–184
116–118, 122, 132, 136–137, 139–140,	social justice, 6, 18, 30, 173
161–162, 165, 170–172, 175	sociotechnical, 5, 17–21, 23–24, 32–33, 52, 54, 56,
power, 18, 29, 31, 39–41, 44, 46, 64, 91, 98,	175, 182
145–146	soft security, 184
Power Pool, 100, 107, 166, 179	solar, 23, 42–44, 51, 66, 71, 75, 83, 92, 131,
practices, 17, 19, 23, 28–31, 47, 58, 62, 65, 75,	134, 147
109, 140	Sovereign Wealth Fund, 171, 175
	Soviet Union, 69, 102, 105, 110, 169, 182
rare earths, 2	stability, 13, 30–31, 34, 40–41, 52, 56, 81, 106, 112,
Raven, Rob, 21–23	133, 138, 153
reconfiguration, 17, 21, 24, 84, 112, 182	state, 8, 18, 25–26, 30–35, 38, 40–41, 46, 55,
referent object, 25–26, 55, 116, 183	58, 69, 73–75, 77, 79, 82, 106, 110, 114,
regime decline, 23, 63–64, 66, 134, 139, 165, 172,	115, 122–124, 127, 129, 132, 136, 145,
175, 182–183	149–150, 152
regulation, 37, 88, 135, 148	stockpiling, 36, 84, 112, 167–168, 171
renewable energy, 1–4, 7, 9, 12–13, 32, 35, 38,	stretch-and-transform, 23, 175
40–49, 56, 59, 60, 71–76, 79, 83–84, 88,	sustainability transitions, 3–6, 12–13, 17–21, 24–26,
91–93, 96, 100, 108, 112, 120, 122–124,	31, 33–34, 37, 41, 47, 52, 54–56, 58, 63,
126, 134, 137, 141, 143–144, 146–147, 152,	82, 118
154–155, 158, 168, 171, 173–174, 177–179,	Sweden, 2, 38, 90–91, 94, 97, 112, 119, 122
181, 186	synergy, 7, 59–60, 62, 80, 83, 87, 107, 109, 131, 167
replication, 23	Szulecki, Kacper, 3, 7, 27, 29, 34, 37–38, 46, 49, 53,
RePower EU, 51, 83	62, 131

technological change, 19, 22, 42 technology, 6, 22–23, 33–34, 37, 41–43, 63, 81, 89, 125–126, 143, 149 tensions, 24, 33, 42, 44–46, 62, 78, 86, 135 territorial, 6, 70, 96, 102, 116, 122 terrorist, 3, 36, 39, 127, 130, 133, 158, 166, 174, 184 threats, 6, 13, 25–30, 32, 36, 58, 77, 78, 92, 104, 106 total security, 107 transformation, 20–21, 33, 44 transition pathways, 13, 20 transport, 1, 9, 17, 23, 32, 72, 97, 99, 123, 129, 151, 159

UK, 2, 8–9, 72, 122, 141, 144 Ukraine, 1, 3, 21, 33, 40, 48–50, 54–55, 70, 77, 80, 90, 93–95, 104–106, 110, 114–115, 121, 126, 135, 137, 144, 151–152, 155, 170, 181 UN, 26, 127, 129 US, 5, 34, 51, 72, 85, 111, 117, 119, 149 unlearning, 64–65, 168 upscaling, 23

Wæver, Ole, 27
wellbeing, 6, 25, 30, 38, 58, 86, 92, 107
Willrich, Mason, 36
wind power, 2, 8–9, 22, 33, 38, 44, 66, 71–72,
80–82, 84, 88–90, 92–93, 96–97, 111–114,
117–118, 120, 123, 125, 131, 134–140, 143,
147, 158, 160, 162, 166, 173, 175
world wars, 5, 32–35, 40
World War II, 32, 34, 96, 182

zero-carbon, 2–4, 8, 11–12, 54, 56, 62, 69, 81, 84–85, 88–89, 91–93, 111, 115, 121, 124, 130, 145–146, 160, 166–167, 175, 178, 185