

Einstellungen zur Kernenergie im EU-Vergleich: Klaffen Eliten und Öffentlichkeit wieder auseinander?

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“20 Jahre Tschernobyl”

Social science / policy analytical questions for the future of nuclear energy

- Public attitudes / acceptance
- Anti-nuclear mobilisation
- The epistemic community
- The cohort question: public, movements, EpiC
- Feasibility of demand-side management
- Regime for allocation of liability to operating state (state bankruptcy...)

Chernobyl

- Tourist destination
 - > ecotourism
 - > disaster tourism
- Surprise
 - > human fallibility
 - > rapid emergency response
 - > the mobile plume

Chernobyl contradictions

- State liable for accident no longer exists
- International policy system responded rapidly (safety and information regime)
- K2 R4 go-ahead (\$1.6bn.)
after Surrey inquiry...

The emergency response

- Chernobyl a global disaster for nuclear industry – not localised (as was TMI)
- Changing risk estimates over time
- Lack of readiness (Germany – need for quick emergency response)
- Explaining lack of response: ostrich or ...?
- Three phases: international community in Phase II before accident announced

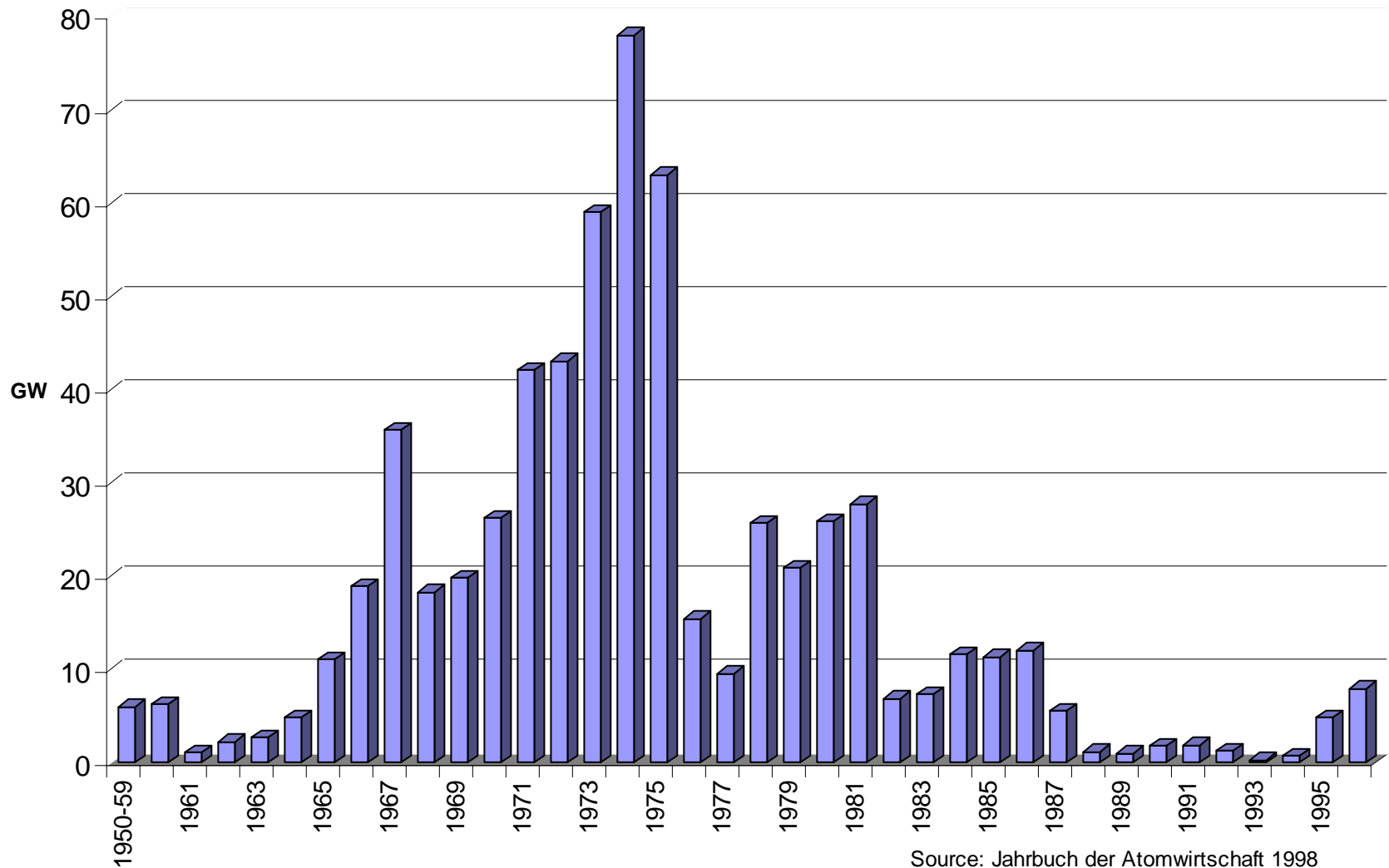
The emergency response cont'd

- 'Policy streams' approach (Kingdon)
 - > policy stream: IAEA/EpiC response 'in drawer' (in preparation since TMI)
 - > problem stream: Chernobyl meltdown
 - > political stream: Glasnost / Gorbachev's reputation-seeking for SU as good environmental citizen
- Two new conventions resulted: information and assistance

Chernobyl consequences

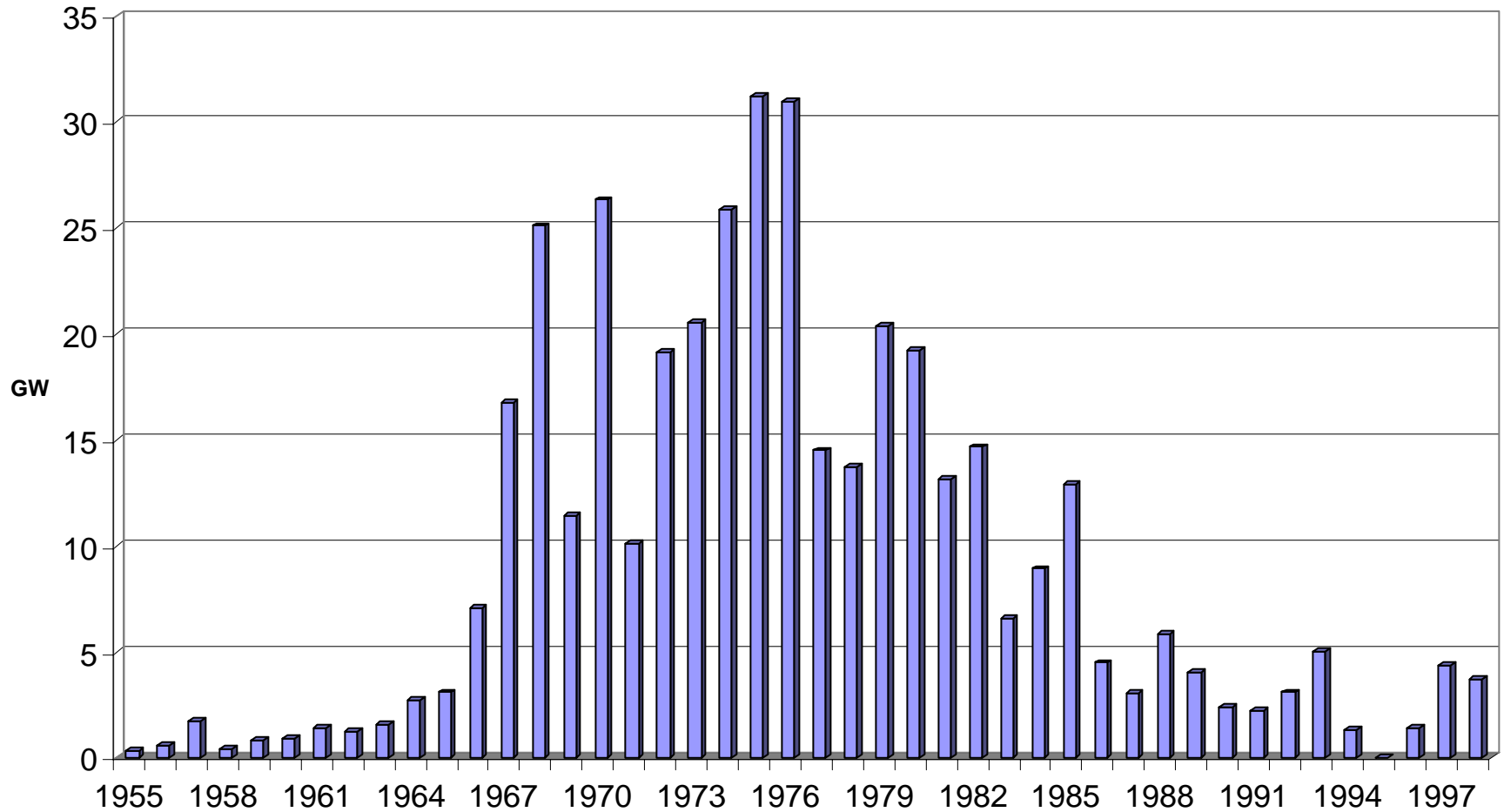
- Nuclear phase-out
- Recognition of health risks
- Recognition of distributional consequences
 - > impact without responsibility
 - > rent extraction

Figure 1. Nuclear power stations ordered world-wide since 1950



Source: Jahrbuch der Atomwirtschaft 1998
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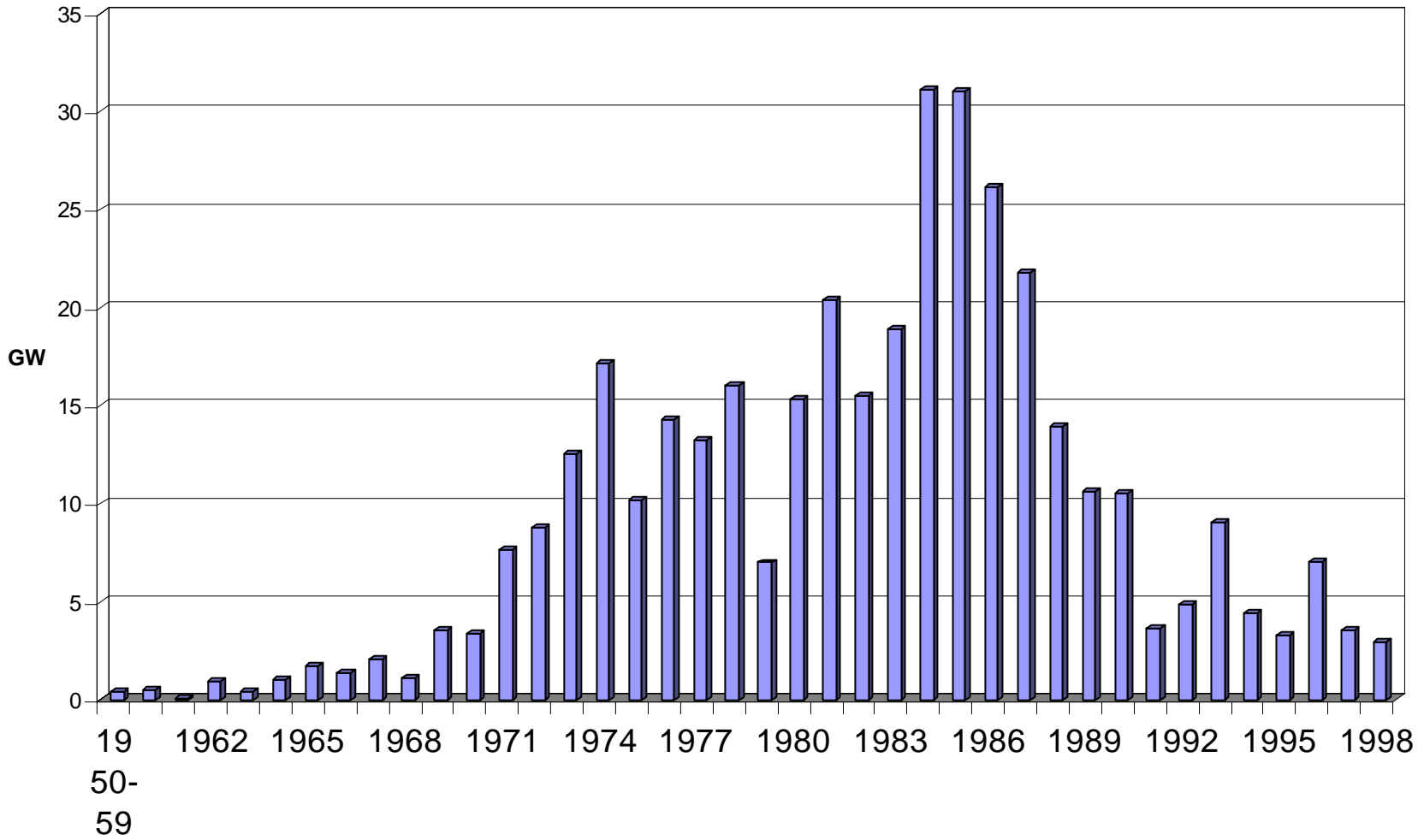
Figure 2. Nuclear power plant construction starts world-wide



Source: IAEA Data

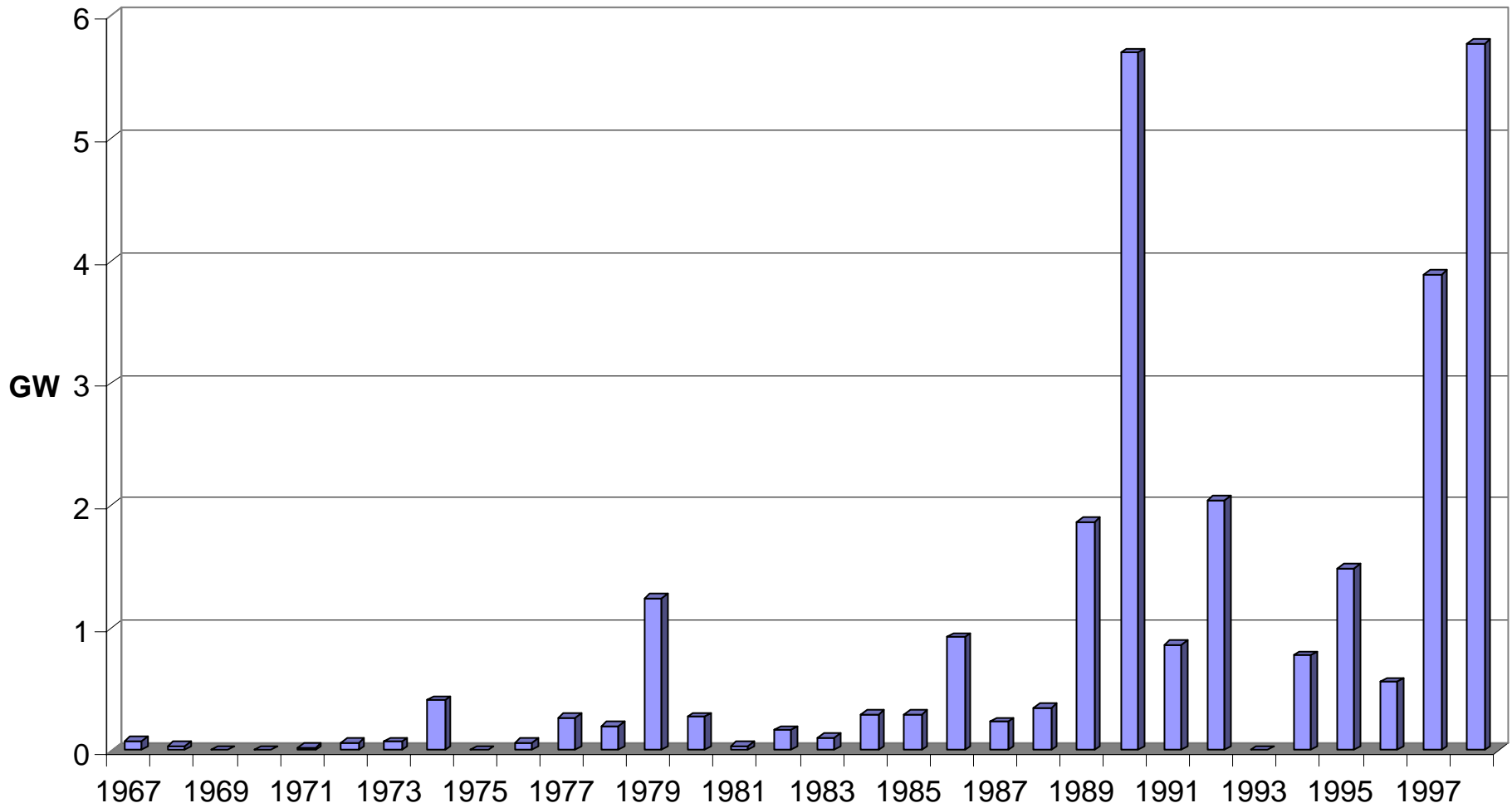
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Figure 3. Nuclear power stations connected to the grid world-wide



Source: IAEA Data
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Figure 4. Nuclear power plant shut down world-wide



Source: IEAE, PRIS 1999

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Agenda shift

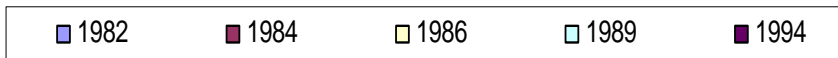
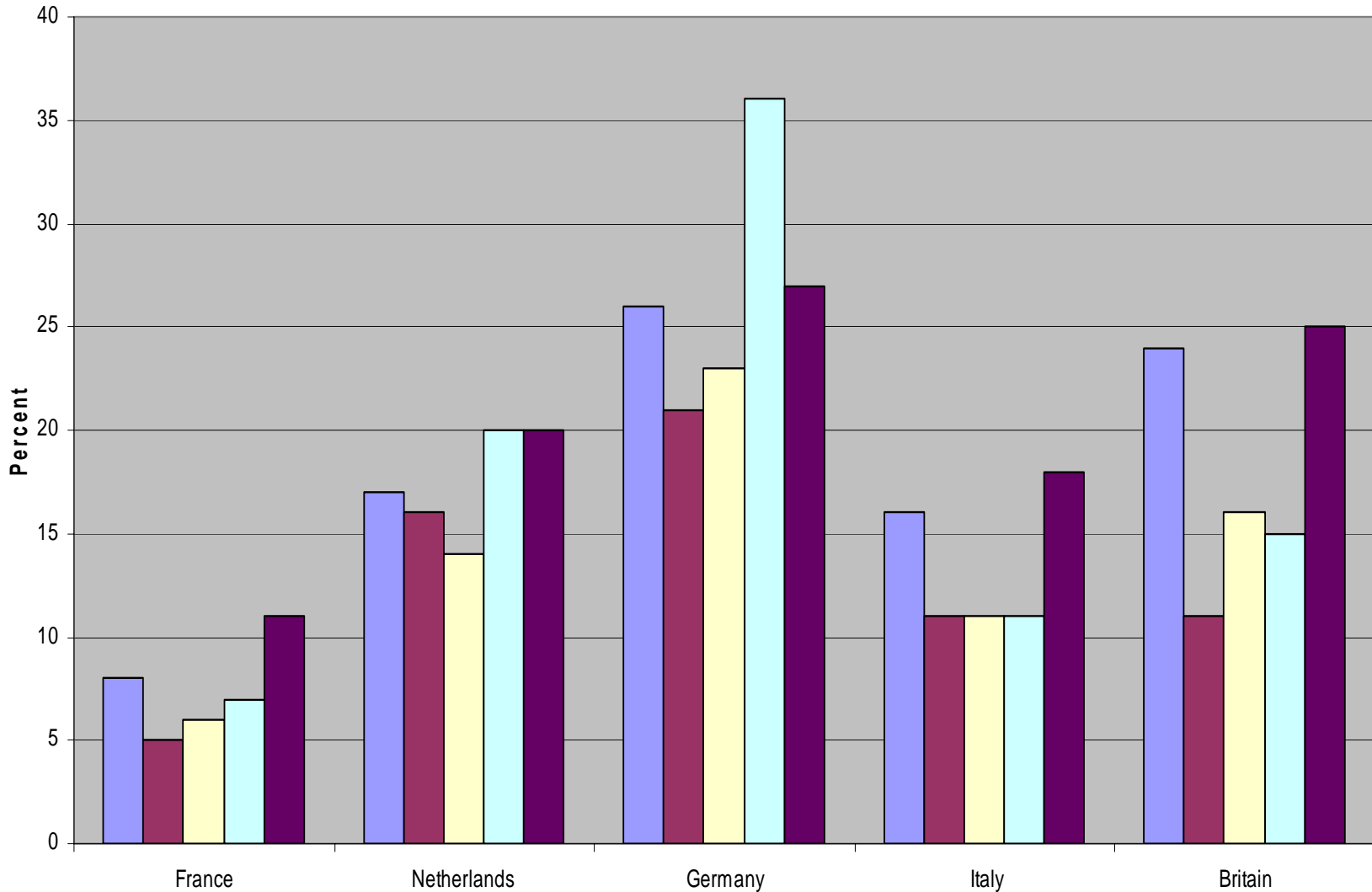
- The issue attention cycle/spiral
 - > clean, safe, cheap, inexhaustible
 - > dirty, risky, expensive, irreversible
 - > low probability, catastrophic consequences,
Atomstaat/ Risk Society
 - > climate change friend
- Public attitudes
 - > shift to resilient scepticism?
- Elite attitudes
 - > drifting back to supply-side (nuclear) solution
- From nuclear to prevent acid rain to nuclear to prevent global warming

Nuclear Power – Risk Evaluation by Country over Time, 1982-96

(Percentage saying development of nuclear energy ‘worthwhile’.)

	E17 1982	E22 1984	E26 1986	E28 1987	E31A 1989
	Spring	Fall	Fall	Fall	Spring
France	60	62	47	51	45
Belgium	37	41	32	43	37
Netherlands	38	41	30	31	29
Germany (FR)	44	54	33	36	36
Italy	42	46	17	23	22
Luxembourg	36	31	13	17	18
Denmark	30	26	13	20	22
Ireland	16	15	8	8	12
Great Britain	43	46	34	44	40
Greece	21	19	14	20	19

Anti-nuclear energy movement mobilisation potential



The Social Construction of Nuclear Energy (1)

- The Engineers' View (1950+)
nuclear clean, cheap, efficient, 'modern' – peaceful use of the atom
- The Environmentalists' View (1970+)
health risks, 'nuclear state', planning and waste issues (NIMBY), nuclear dirty, expensive, inefficient, critique of military industrial complex, irreversibilities
- Three Mile Island (1979) and Chernobyl (1986)
risk society, moratorium, need to shift to renewables and behaviour change (demand-side solution)
- Today (2000+)
security state, terror target, global warming, loss of faith (by elites) in demand-side, split in environmental constituency

The Social Construction of Nuclear Energy (2)

After Chernobyl

- Unacceptable risks
- Uneconomic
- Moratorium

but

- Limited support for investment in renewables (e.g. WSSD (2002))
- Slow to ratify Kyoto

After Kyoto and 9/11

- Competing risks: terror and global warming
- Security state
- Return to technical fix ('clean coal' and nuclear)
- 'New' technologies (pebble-bed small reactors, fusion)
- Environmentalists split (Lovelock – GAIA, Attenborough: planet better off without humans)

Supply-side vs. demand-side

- Cynical about human adaptability?
- Nuclear energy as 'issue supply' for anti-nuclear mobilisation

Conclusions/remaining questions

- Next cohort: anti-globalisation movement?
- Public attitudes:
 - > What will they be?
 - > Will they matter?
- Distributional issues and liability
- Engineering capacity
- Strengths of advocacy coalitions in the epistemic community