

The CEE Energy Transition: Repeating What Happened 50 Years Ago

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Working-hypotheses

- The CEE's energy transitions were externally driven by a hegemon. In the 1960s this was the Soviet Union, currently it is the EU.
- The transitions share characteristics: initially political process managed via bureaucratic allocation, only alongside which market mechanisms (gradually) come to play a role.

Under Soviet hegemony

- CEE economic and energy policy dependent on Moscow → available, accessible, affordable, acceptable source of energy
- Imports negotiated with Moscow → market mechanisms secondary
- CEE planned to meet incremental energy demand met with imported oil, but Soviet production was faltering

(mtoe)	Domestic production	Imports from Communist countries	Imports from the West	Exports	Consumption
Bulgaria	20.54	31.01	2.58	0.95	53.18
Czechoslovakia	123.22	44.06	1.09	13.74	154.50
East Germany (GDR)	159.39	49.64	2.99	9.25	202.78
Hungary	37.67	23.92	1.09	3.94	58.62
Poland	257.72	31.55	-	64.46	224.81
Romania	119.54	5.85	6.26	16.86	114.78
Total	718.08	186.06	13.87	109.48	808.66

The Hungarian case

- Rising demand for Soviet oil
- Moscow: caps/sector-specific trade & offers alternatives: electricity, natural gas, nuclear tech.
- Price of oil increases, but volumes and prices *soft*
- Price of nuclear unclear, oil negotiations go well + domestic oil discoveries → hesitance to change
- Moscow: need for change in mid-1970s → electricity + natural gas + nuclear

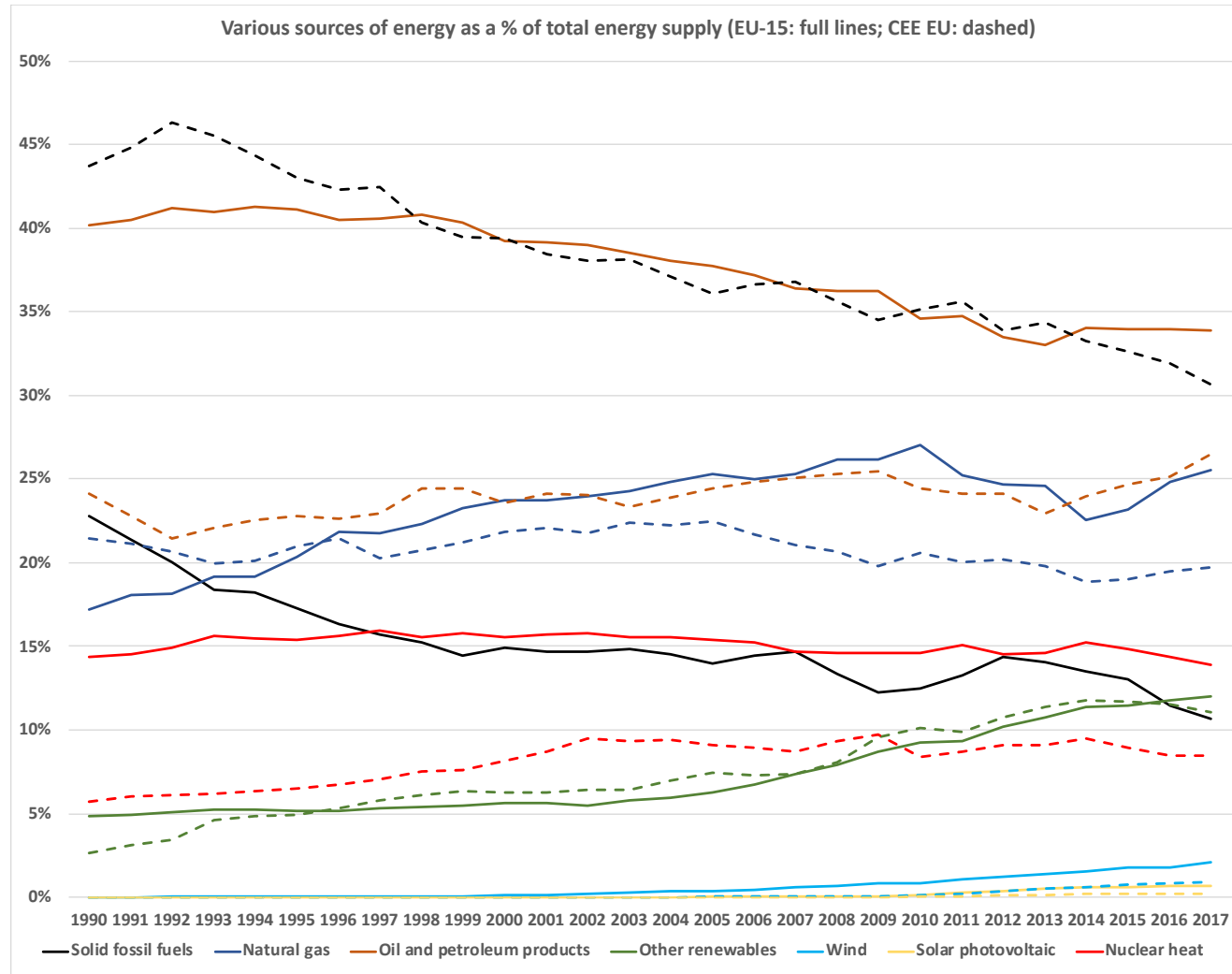


The EU's renewable ambitions



- The EU has positioned itself as the leader in climate action
- Friction between EU-15 and CEE EU on 2020, 2030, and 2050 targets
- Lock-ins are strong; energy demand is not growing as rapidly as in the 1960s
- Coal in Poland (50%) and Czech Republic (40%) of energy demand
- CEE EU concerned over costs → unambitious targets reliant on biomass

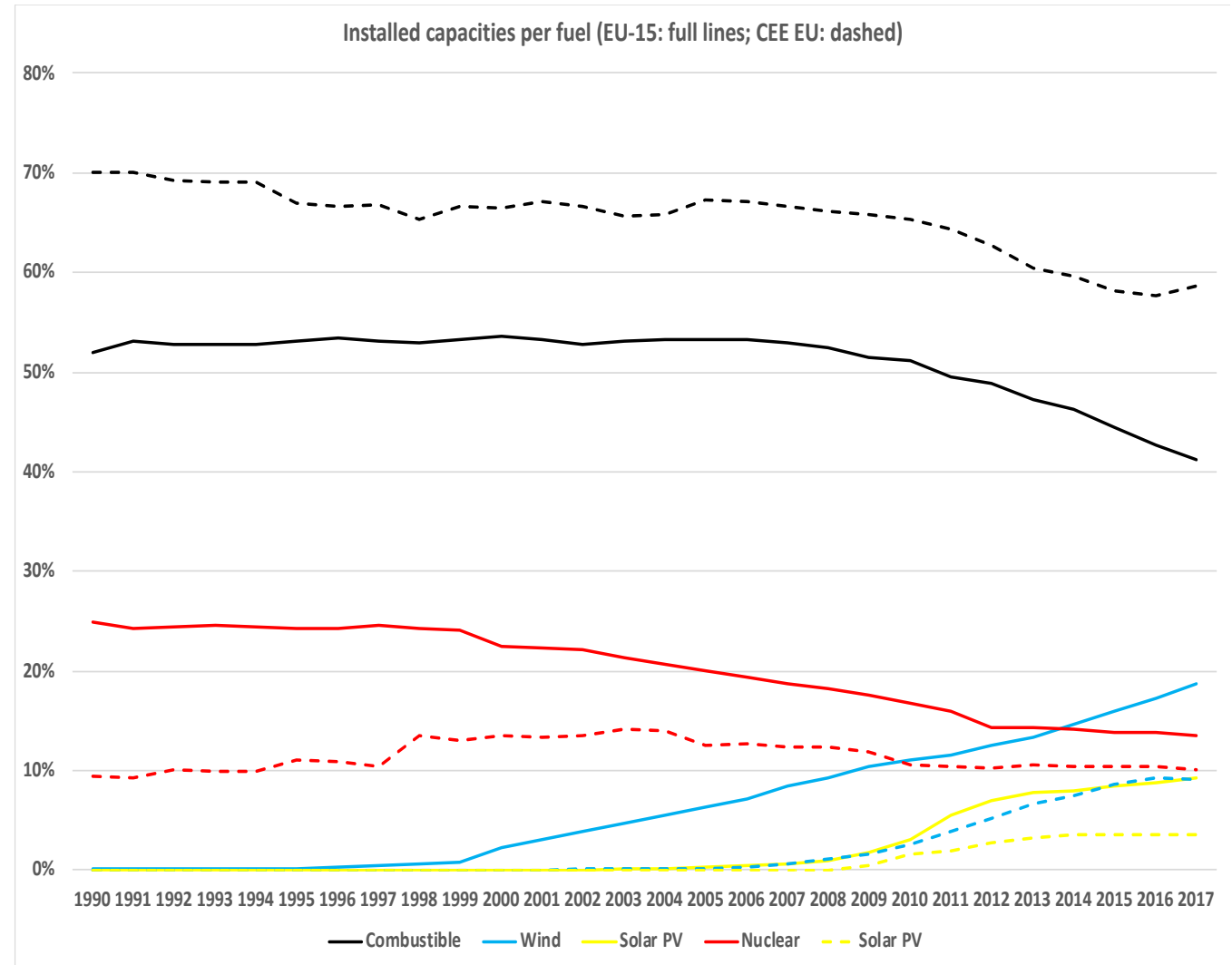
Energy supply per fuel EU-15 vs CEE EU



- Coal's share much higher in CEE EU
- Motorisation still driving climbing oil demand in CEE EU
- CEE EU renewable market penetration following EU-15

Installed electricity generation capacities per fuel

- Uptick in CEE EU combustible
- Wind curve flattening out in CEE EU
- Market dynamics do not yet seem to be enough to drive the transition in the CEE EU



Concluding thoughts

- Lock-ins push CEE EU states to resist externally imposed energy transition
- Political decision-making and bureaucratic tools used by the hegemon to impose change
- Incremental demand is gradually met via energy sources based on market mediation

Literature

- Hoffman, G.W., 1983. Energy Dependence and Policy Options in Eastern Europe, in: Jensen, R.G., Shabad, T., Wright, A.W. (Eds.), *Soviet Natural Resources in the World Economy*. University of Chicago Press, Chicago-London, pp. 659–668.
- Eurostat, 2019a. European Commission > Eurostat > Energy > Data > Database > Energy (nrg) > Energy statistics - quantities (nrg_quant) > Energy balances (nrg_bal) > Complete energy balances (nrg_bal_c) [WWW Document]. URL <https://ec.europa.eu/eurostat/web/energy/data/database> (accessed 9.16.19).
- Eurostat, 2019b. European Commission > Eurostat > Energy > Data > Database > Energy (nrg) > Energy statistics - quantities (nrg_quant) > Energy infrastructure and capacities (nrg_inf) > Electricity production capacities by main fuel groups and operator (nrg_inf_epc) [WWW Document]. Eurostat. URL <https://ec.europa.eu/eurostat/web/energy/data/database> (accessed 9.16.19).