# Greening politics SITE Energy Talk 2024

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How can we do so without negative spillovers across systems?

How can we do so in a politically feasible way?

### EU27 CO2 emissions



Figure 1: Uphill...

## EU27 CO2 emissions



Figure 2: ... and downhill

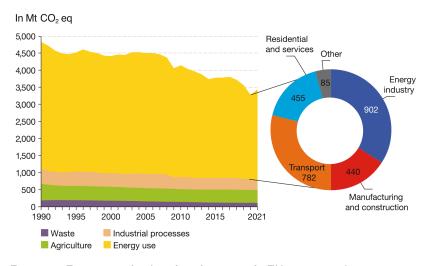


Figure 3: **Energy is the key battle ground**. EU emissions by source. Source: EEA (2023).

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- New supply (solar, wind) with very different characteristics
- Increasing demand in coming decades ("electrify everything")
- EU needs to go from 3k TWh/year to 7k TWh/year in 2050



## Demand for electricity will more than double by 2050 with wind energy meeting 50%

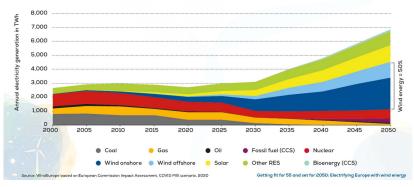
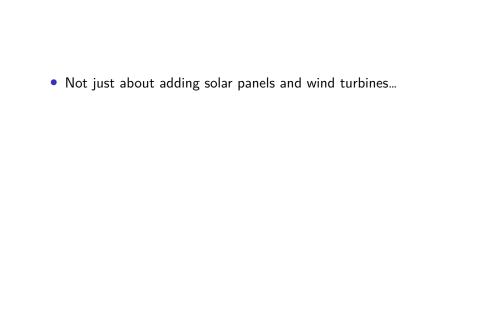


Figure 4: Need to build up capacity in Europe. Source: ETIP.



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- Need to improve transmission
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- Need to increase demand flexibility (dynamic pricing, IoT)
- We are still learning how to do some of these...
- And most require reliable and aggressive public policy

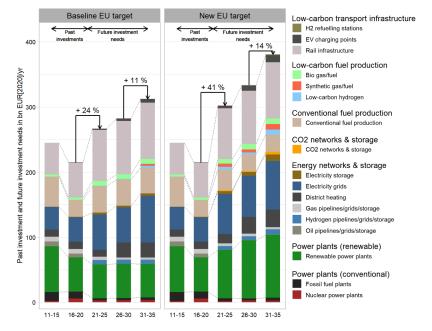


Figure 5: Large investments are needed. Source: Klaasen & Steffen 2023.

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- EU-level action: EU ETS, CBAM

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- Negative feedback loops. Side effect of policy interventions (Egli et al. 2022, Colantone et al. 2024)
  - ightarrow Critical for long-term democratic sustainability of policy

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- i. Accelerates innovation
- ii. Creates economies of scale
- iii. Political lock-in (Bolet et al. 2023)
  - Inflation Reduction Act, European Green Deal, Just Transition Mechanism, etc.

#### To conclude

- Challenge: how to design politics-resilient climate policy?
- Current hypothesis: industrial policy as silver bullet...
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- iii. Political lock-in (Bolet et al. 2023)
  - Inflation Reduction Act, European Green Deal, Just Transition Mechanism, etc.
  - Will this work? Reasons to be concerned: aspirations, capacity, labor scarcity, implementation... Lim et al. 2023, Gazmararian and Tingley 2023

#### Thank you for your attention!

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