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Managing coal transitions - insights from the Coal Transitions project

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Agenda

- **Context - momentum on coal transitions**
- **Research project « coal transitions »**
- **Key elements of a coherent strategy**
  - Governing the transition
  - Dimension: workforce in the coal sector
  - Dimension: affected regions
- **Insights from European case studies**

Source: IDDRI

Global momentum on coal transitions

Global momentum on phasing out coal

- 2015: Paris Agreement - reaching peak emissions asap following carbon neutrality in the second half of the century
- 2018: IPCC Special report on 1.5: global use of coal must be zero in 2030 with investments in (unabated) coal must stop in 2030
- → strengthening of national climate governance frameworks, e.g. adoption of carbon neutrality

Trigger for ambitious initiatives and governments pledges, including:

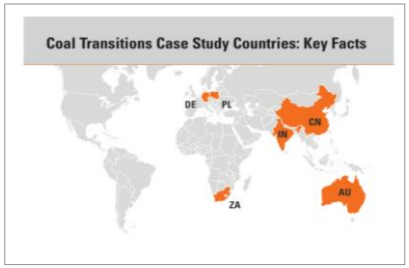
- Powering Past Coal Alliances (2017):
- Silesia Declaration at COP 24 (2018)

- Germany set up dedicated stakeholder commission (2017) → phase out 2035-2038 (2018)
- Denmark announced phase out by 2030
- Sweden already by 2022
- Spain well before 2030 – currently under discussion
- Chile launches governmental led coal phase out initiative (2019) … etc.

Coal Transitions project

Project “Coal Transitions”

- Two-year trandisciplinary research project to link policies and research on coal transitions
  → carried out by six research institutions led by IDDRI and Climate Strategies
- Aim: Filling the gap of international dialogue and lesson learning on coal transition
- Focus countries: Australia, China, Germany, India, Poland and South Africa



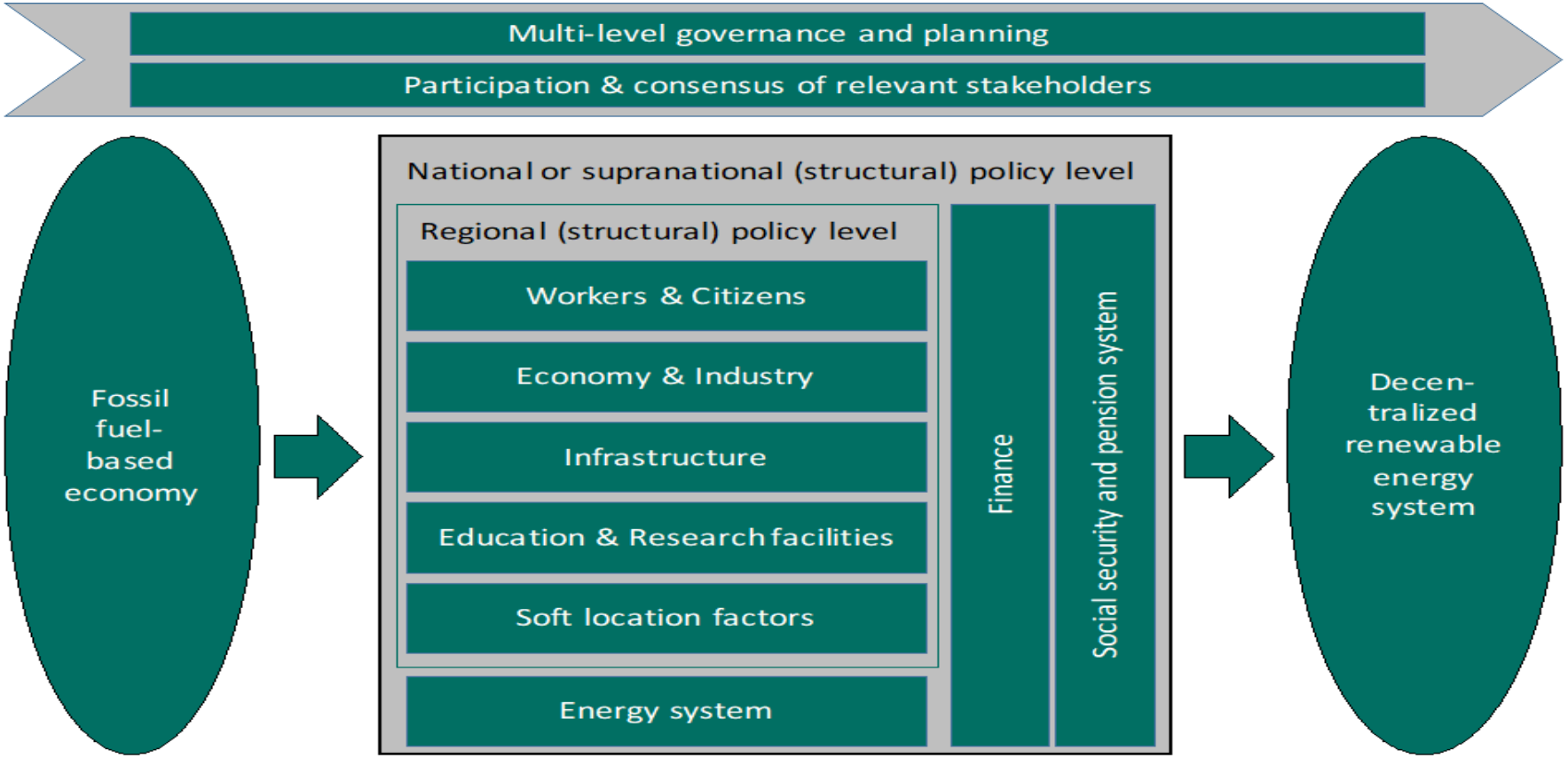
Source: Coal Transition

What are we talking about ?

Key elements of a coherent strategy

- (Paris-compatible) transformation of the energy system
- Avoiding stranded assets
- Avoiding stranded workers
- Regional economic transition
- International dimension (especially for major exporters/importers)

Governing the coal transition



→ depending on local circumstances, higher/lower weight can be given to different issues.

Dimension – workforce in the coal sector

Necessity to understand the labour market and the profile of work force (age, skills, and educational profile); interventions include:

- **Setting a timeline** for coal phase down and allowing existing workers to retire naturally
- **Providing a bridge to pension** for older workers or offering voluntary redundancy packages
- Supporting **workers** who have appropriate skills or are willing to retrain **to take on alternative roles** within the company.
- Developing **regional worker transfer programs** to support the direct transfer and on-the-job retraining of workers with appropriate skills **to move to an alternative local job**.
- **Redeploying**: offering employees who may struggle to find work in other roles or sectors the option to transfer their skills to alternative coal-based sites with the company- Establishing integrated multi-purpose retraining programs.

Dimension – affected regions:

Regional and country specific contexts matter, e.g.:

- geographical proximity of coal communities to other centers of economic activity
- the size of the coal sector in the local or regional economy (GDP and employment)

Nonetheless, **solutions must be linked to economic geography and local competitive advantage**, interventions include:

- Related diversification → need to build on existing competitive advantages of region and local knowledge and entrepreneurship.
- "Smart specialization" → supporting the growth of economic activities and building on the region's strengths and competitive advantages (e.g. using existing infrastructure, land availability, cultural and industrial heritage etc.)

Soft attractiveness factors and infrastructure matter:

- to support re-investment in the area, underpin land-value and thus the wealth of the local community, and limit or reverse demographic outflows

Last but not least, **it may take time:**

- Regional economic diversification can succeed over long- term, but can be a multi-generational challenge.

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Main conclusions:

- Coal transitions are happening already, but more effort is needed for Paris goals
- Well below 2°C-compatible coal transitions are technically and economically feasible by 2050, even for major emitters.
- A socially just transition for coal sector workers and citizens of coal producing regions is possible.
- Coal transitions can help to provide numerous co-benefits for society

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Insights from case studies - Germany / Poland

Case study Germany:

To comply with below 2 degree target, need to phase out hard coal in lignite shutting down generation capacities in the early 2020s – phase out in 2025-2040

- Insecurity shifting towards Paris-compatible ambition seems to depend on availability and commercial deployment of technologies but need supportive policy environment (esp. in the industry sector)

- Nevertheless, <u>phasing out from a technical and economic perspective is possible</u>

- Overcoming current barriers includes:

→ Structural funds securing long-term payments to build new capacities (for education, research, industry)

→ Policies to address distributional effects of potential power price increases (taking into account poor households and risk of carbon leakage of domestic industries)

→ Guaranteed secured retirement payments + retraining of workers

→ Sufficient funding from operators to pay renaturation and follow-up costs

Insights from case studies - Germany / Poland

Case study Poland:

To contribute to the Paris Agreement in line with efforts by other major economies, Poland needs to reduce its coal consumption by 20% btw 2015 and 2030 and by 55% btw 2015 and 2050

- Most of hard coal in Poland is consumed domestically, therefore
- → A drop in coal consumption will contribute to and follow phase out in production
  (Lignite production is expected to further decrease independent of climate policy by the 2030s)
- Major challenge is **managing the transition for the affected work force**

- Recommendations for public policy addressing labour-related effects include:

  - Use window of opportunity for harmless reduction resulting from natural attrition and hiring freeze
  - Guarantee assistance measures for ex-miners + promote vocational training to ex-miners in order to stay in the labour market
  - Enrolment into retraining and labour market reforms as a default option
  - Guarantee broad social consensus including NGO and local organisations for the reforms

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Thanks a lot for your attention !

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