

CoalExit in Deutschland – CoalTansitions Global

Strommarkttreffen Kohleausstieg: Vorschläge für Deutschland; Implementierung in anderen Ländern;

GIZ Berlin; 01.08.2019



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Research Group CoalExit, TU Berlin and
German Institute for Economic Research (DIW Berlin)

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The screenshot displays the coaltransitions.org website. The top navigation bar includes 'Home | Coal Transitions', a search bar, and a 'Pausiert' button. The main header features the 'COAL TRANSITIONS' logo and links to 'FINDINGS', 'PUBLICATIONS', and 'ABOUT'. A secondary navigation bar includes 'RESEARCH HUB', 'PARTNERS', 'NETWORK', 'RESEARCHERS', and 'PROJECTS'. The left sidebar shows 'PUBLICATIONS' and 'ABOUT' tabs. The main content area is divided into two sections. The left section, titled 'PUBLICATIONS (54)', features a 'FILTER' section with 'Authors' and 'Keywords' dropdowns, a timeline from 2011 to 2019, and a 'RESET' button. Below the filter, three publications are listed: 'Indonesia's Coal Dynamics' (2019) by Deon Arinaldo and Julius Christian Adiatma, 'The death spiral of coal in the U.S.: will changes in U.S. Policy turn the tide?' (2019) by Roman Mendelevitch, Christian Hauenstein, and Franziska Holz, and 'Socio-Economic Considerations for a Paris Agreement-Compatible Coal Transition in South Africa' (2019) by Jesse Burton, Andrew Marquard, and Bryce McCall. The right section, titled 'Researchers', features a profile for Pao-Yu Oei, a member of the 'COAL EXIT GROUP'. His background is in Industrial Engineering and Economics, and his focus topics are global coal phase-out, political economy of coal, carbon lock-in/deep incumbency, socio-ecological transformation, and renewables. His email is pyo@wjp.tu-berlin.de and his telephone is +49-(0)30-314-75846. Below his profile is a world map with blue highlights in North America, Europe, and Asia. A large blue banner at the bottom of the right section reads 'A just and timely coal transition is possible but needs political support' with a 'READ MORE' button. The bottom of the page shows a system tray with the time 07:33 and date 23.07.2019.

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PUBLICATIONS ABOUT

FILTER

Authors Select Authors

Keywords Select Keywords

2011 2013 2015 2017 2019 RESET

PUBLICATIONS (54)

2019 **Indonesia's Coal Dynamics:**
Deon Arinaldo • Julius Christian Adiatma
#coal #energy #Indonesia #just transition

2019 **The death spiral of coal in the U.S.: will changes in U.S. Policy turn the tide?**
Roman Mendelevitch • Christian Hauenstein • Franziska Holz
#CCS #climate policy #coal #energy policy #mining #ports #USA

2019 **Socio-Economic Considerations for a Paris Agreement-Compatible Coal Transition in South Africa**
Jesse Burton • Andrew Marquard • Bryce McCall
#coal #energy #just transition #South Africa

COAL TRANSITIONS FINDINGS PUBLICATIONS ABOUT

RESEARCHERS

COAL EXIT GROUP

Pao-Yu Oei
Background: Industrial Engineering, Economics
Focus topics: Global coal phase-out, Political economy of coal: carbon lock-in/deep incumbency, Socio-ecological transformation, Renewables
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Telephone: +49-(0)30-314-75846

Main Finding

A just and timely coal transition is possible but needs political support

READ MORE

07:33
23.07.2019

Overview of selected publications from the CoalExit - Team



SRU. Start coal phaseout now (2017)



Ostdeutsche Braunkohle (2017)



Erfolgreicher Klimaschutz durch zügigen Kohleausstieg in Deutschland und NRW (2018)



Kohleausstieg in NRW im deutschen und europäischen Kontext (2018)



Weichenstellung Kohlekonsens: Kohlevorräte ermöglichen den Erhalt des Hambacher Waldes und aller noch bedrohten Dörfer (2019)



Historical case study on previous coal transitions in Germany (2018)



Coal transition in Germany (2018)



Prospects for steam coal exporters in the era of climate policies: a case study of Colombia



Phasing-out coal in the German Energy Sector (2019)



Erneuerbare Energien als Schlüssel für das Erreichen der Klimaschutzziele im Stromsektor (2019)

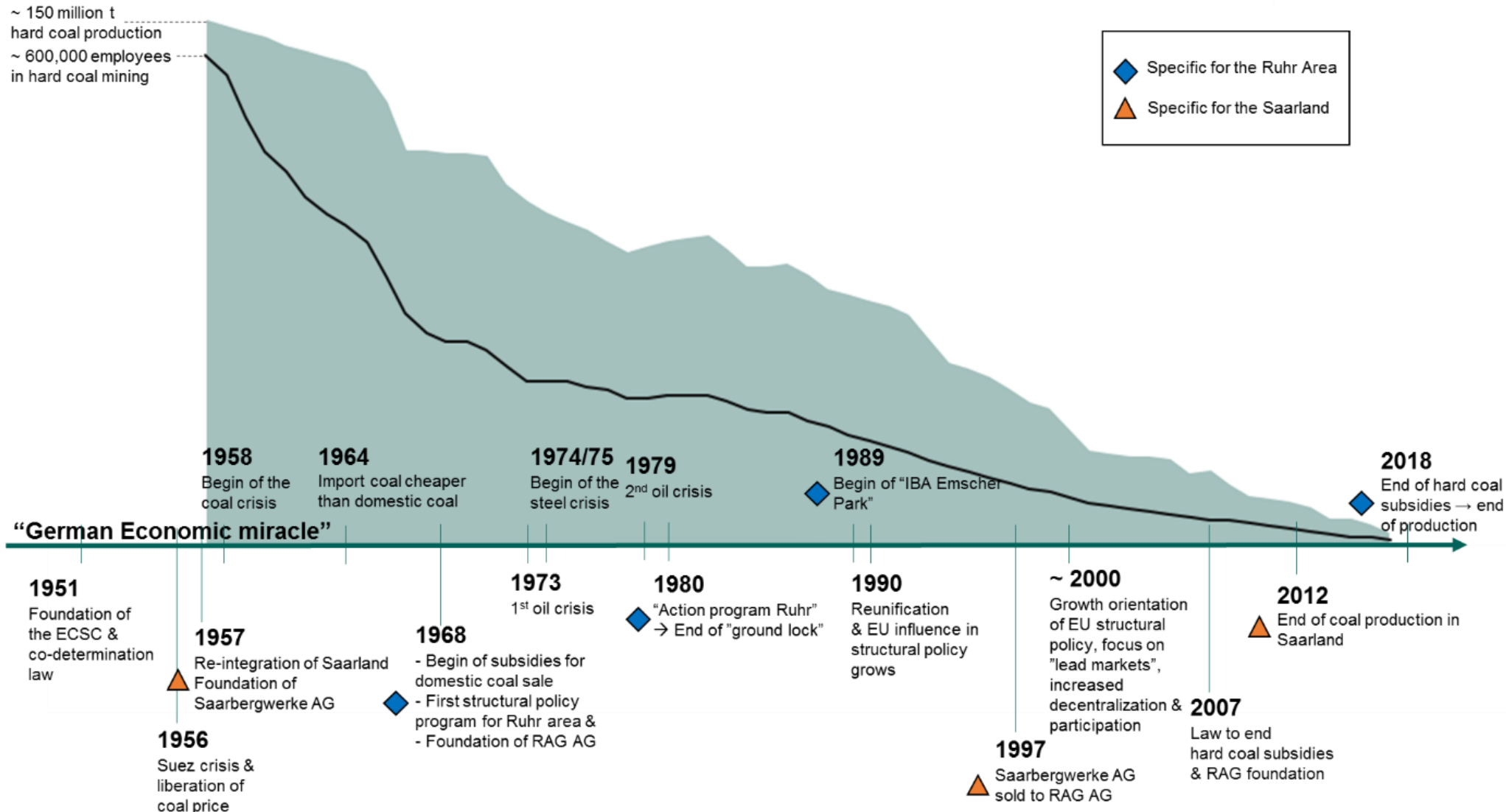


Klimaschutz und Kohleausstieg (2019)

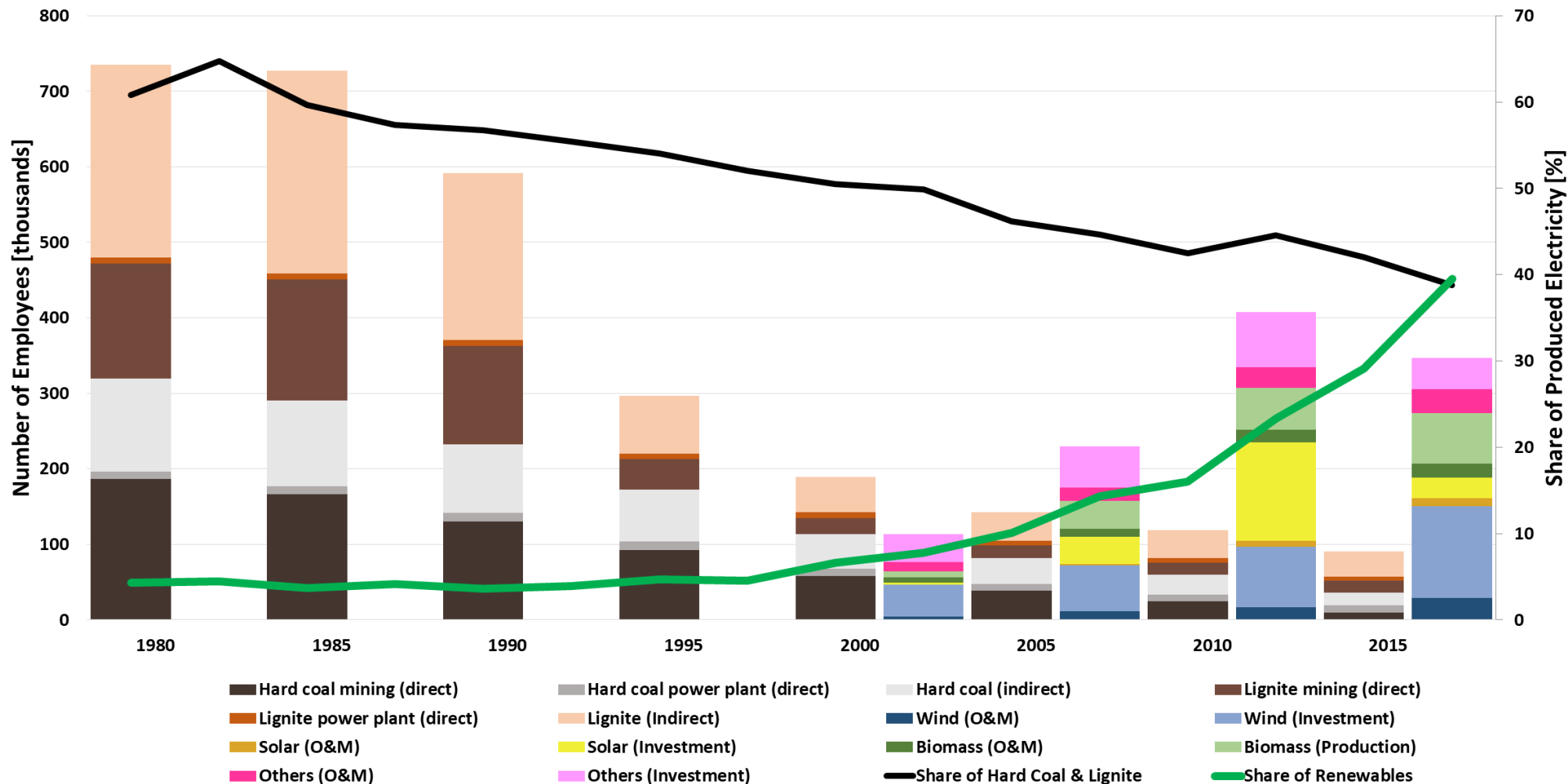


The death spiral of coal in the U.S.: will changes in U.S. Policy turn the tide? (2019)

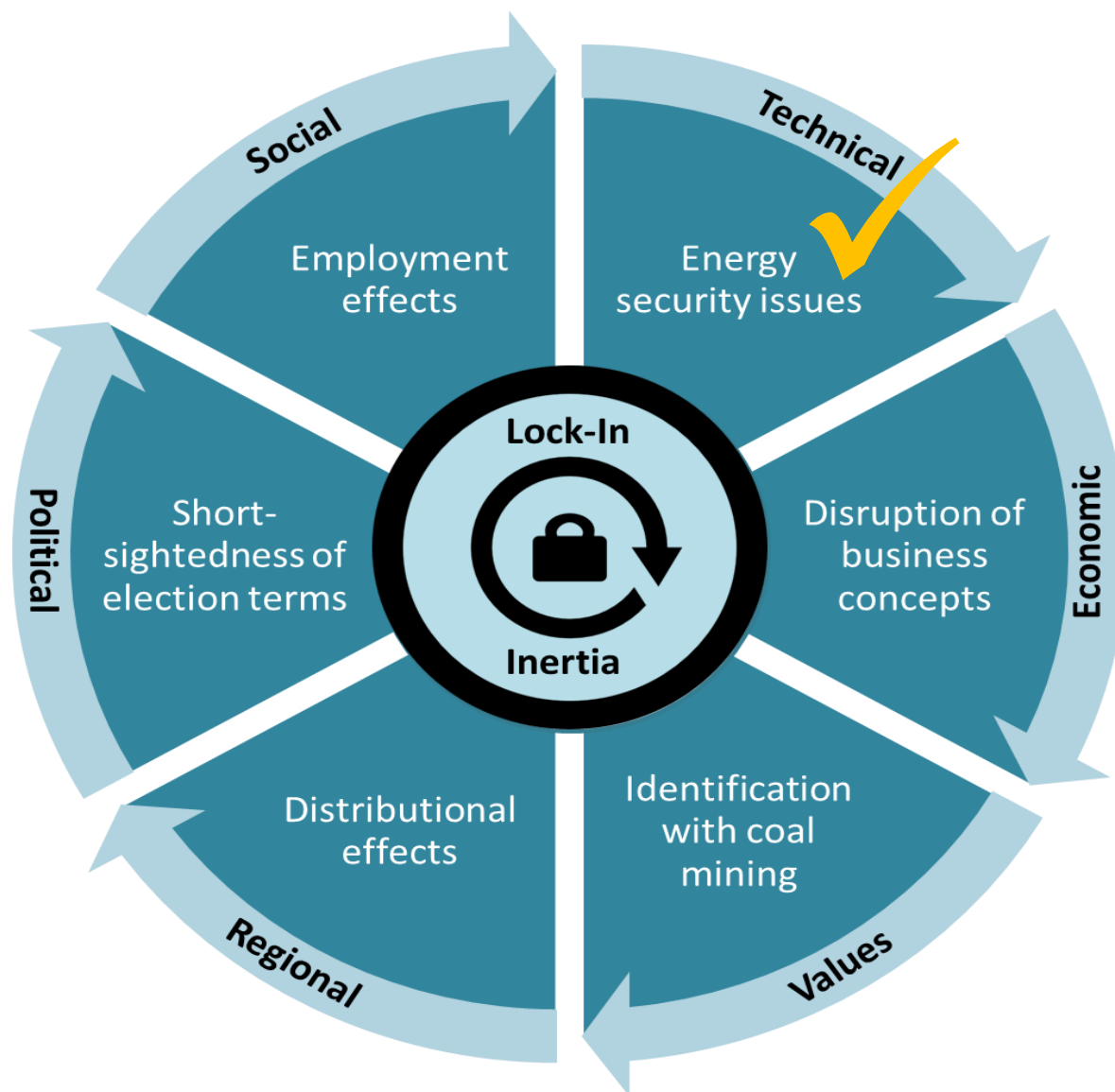
Germany: Long history starting with the European Coal and Steel Community in 1951 and coming to an end in 2018



Germany 1980 – 2017: Declining coal and rising renewables employment and electricity production



The carbon lock-in of coal regions and actors originates from various sources



Source: Oei et al. (2019).

Preview: New paper to be published this week

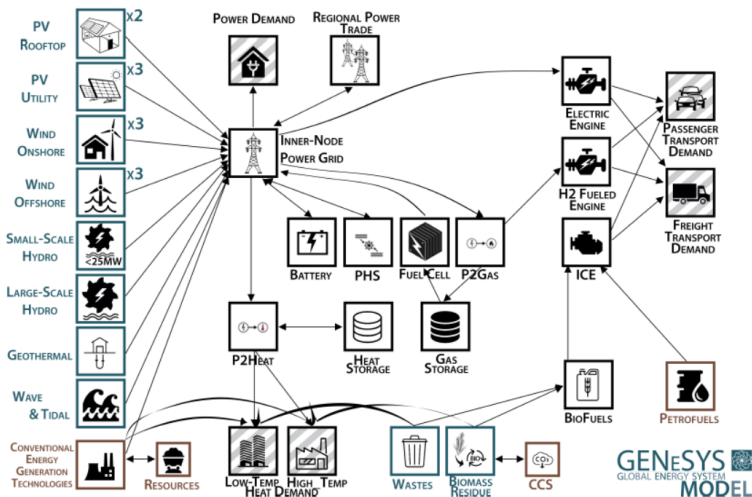


Figure 1. Structure of GENeSYS-MOD v2.0.

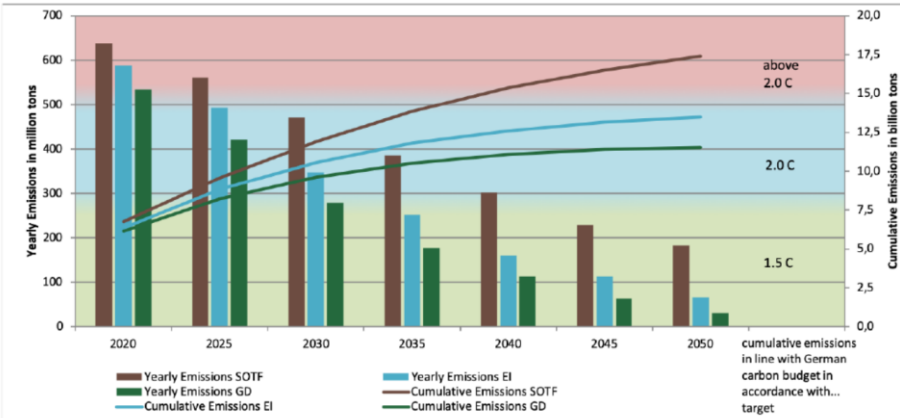


Figure 8. Development of yearly and cumulative CO₂ emissions per scenario. CO₂ emissions from

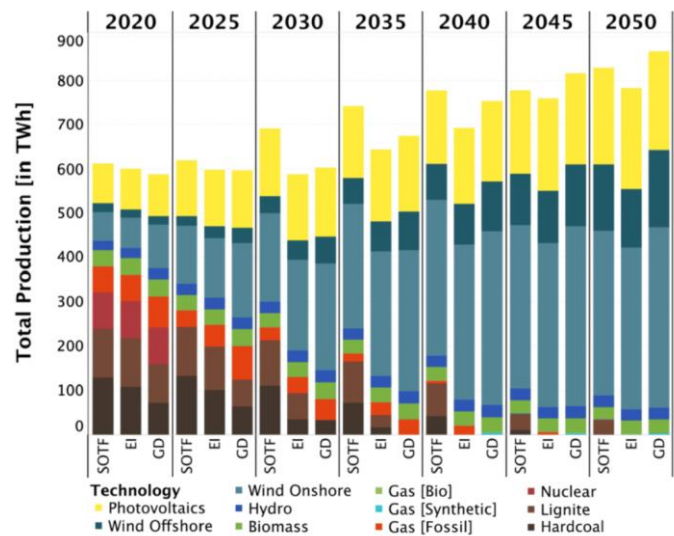


Figure 3. Development of Germany's power production according to the respective scenario.

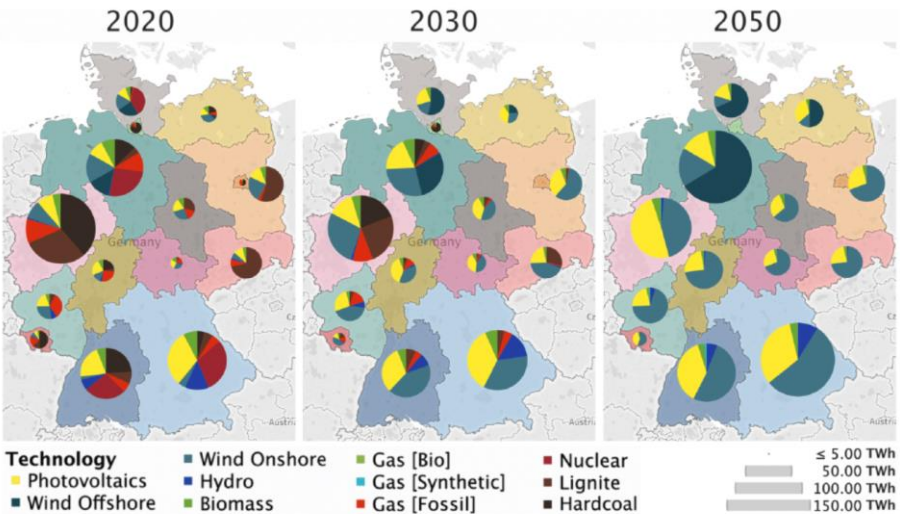
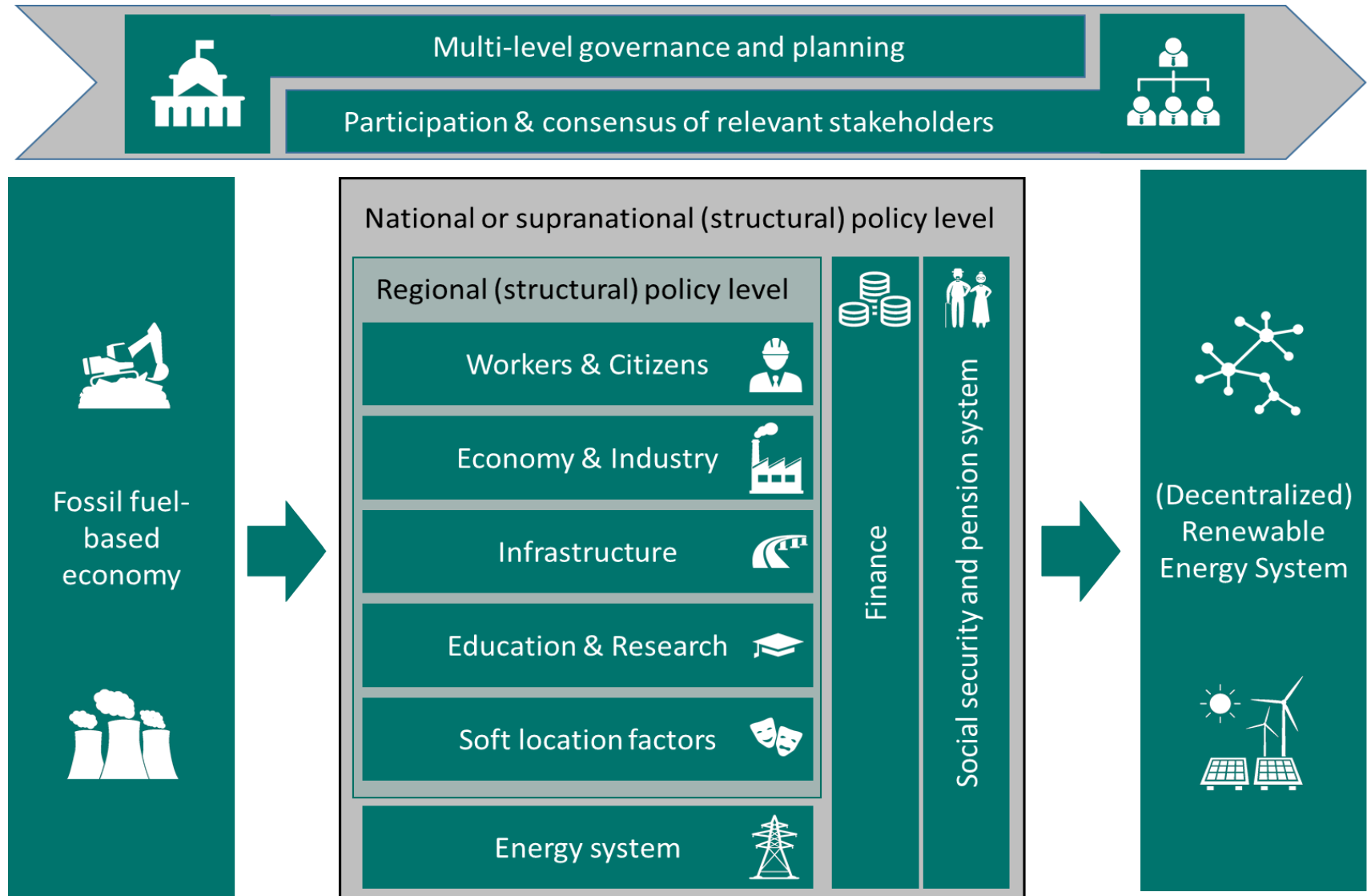


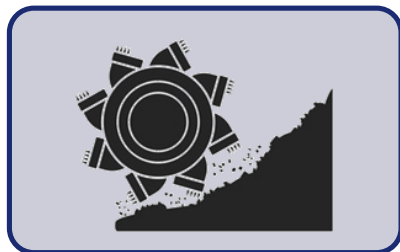
Figure 4. Regional development of Germany's power production for the Green Democracy scenario.

Managing a 'just transition'



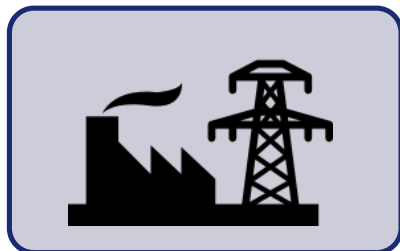
The upcoming coal phase out affects countries differently

Need to differentiate between countries:



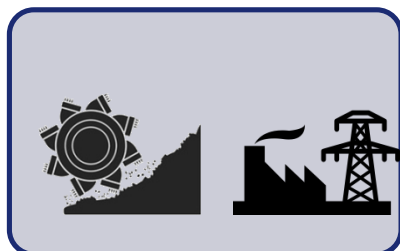
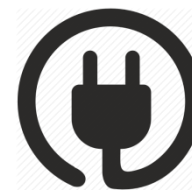
that only mine coal (e.g. Colombia)

- employment
- income from exports



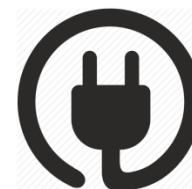
those burning coal (e.g. UK and many countries in Europe)

- energy security
- (employment)



those doing both (e.g. US, China, India, South-Africa, Germany)

- energy security
- employment
- (income from exports)



Regional adjustment of political instruments

e.g.
Colombia

**Financial payments
as compensation for
a moratorium on
new mines and
export losses**





**Support for RES to
meet rising energy
demand, enable
energy access &
create jobs**



**Active & passive
labour market
instruments to enable
a just transition**



e.g.
Europe or
US

**Moratorium on new
mines**



**Existing coal power
plant fleets need to be
closed**



**Support for RES to
replace fossil capacities
& create jobs**



**Active & passive labour
market instruments to
enable a just transition**



e.g.
China or
India

**Moratorium on new
mines; maybe linked
with compensations**



**Moratorium for new
plants to prevent
(stranded) assets**



**Support for RES to
meet rising energy
demand, enable energy
access & create jobs**

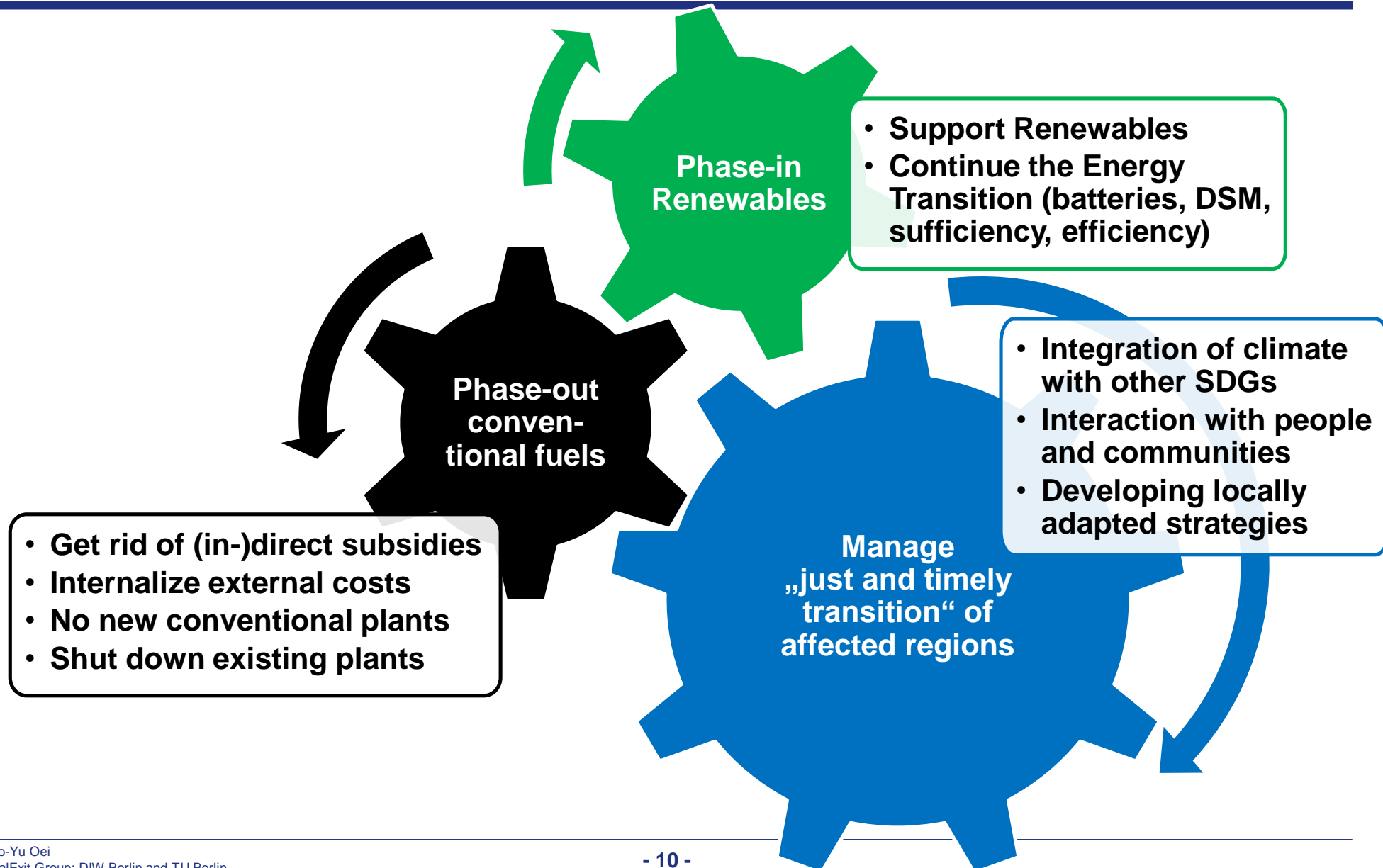


**Active labour market
instruments to create
new jobs**



Requirements to future energy markets:

Enable a transition to 100% renewable energy sources



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