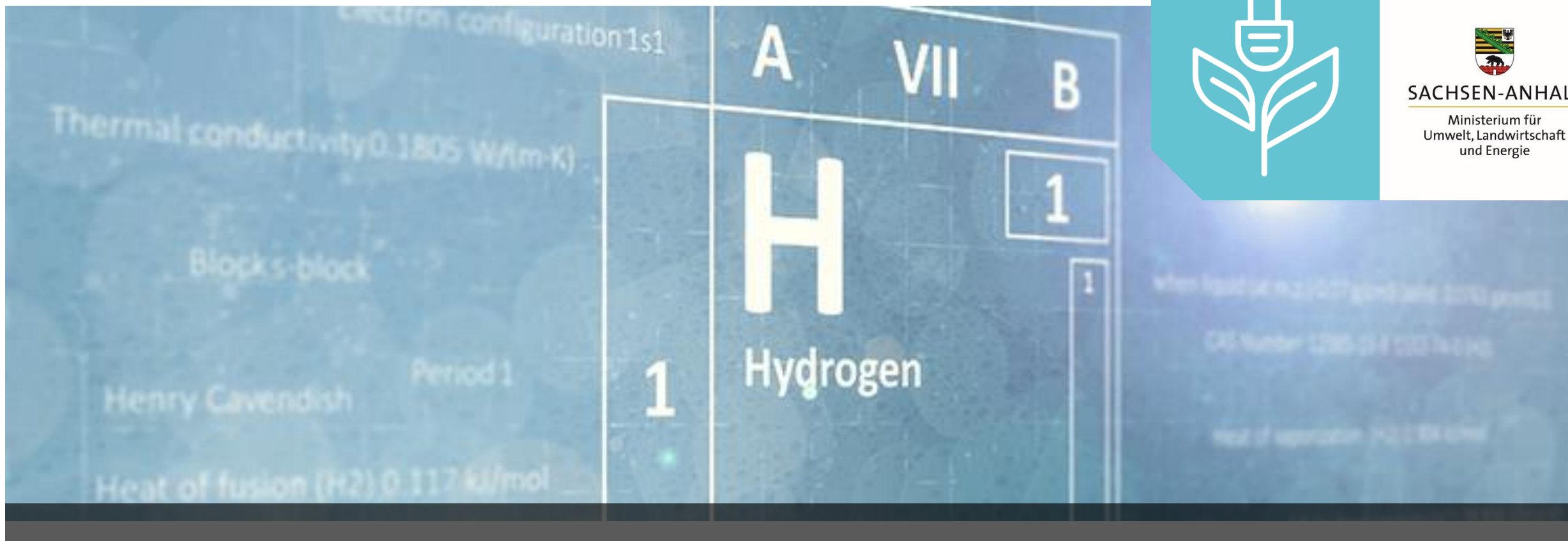




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Hydrogen strategy as action to decarbonize the land of Saxony-Anhalt

03.12.2020

Dr. Stötzer

Department for Environment, Agriculture and Energy of the Land of Saxony Anhalt



Content



01

From where we come....

- Climate policy
- European H2 strategy
- German H2 strategy
- H2-Concept of coal regions in East Germany

02

...to where we go.

- Regional H2 strategy
 - Process
 - Green paper
 - White paper

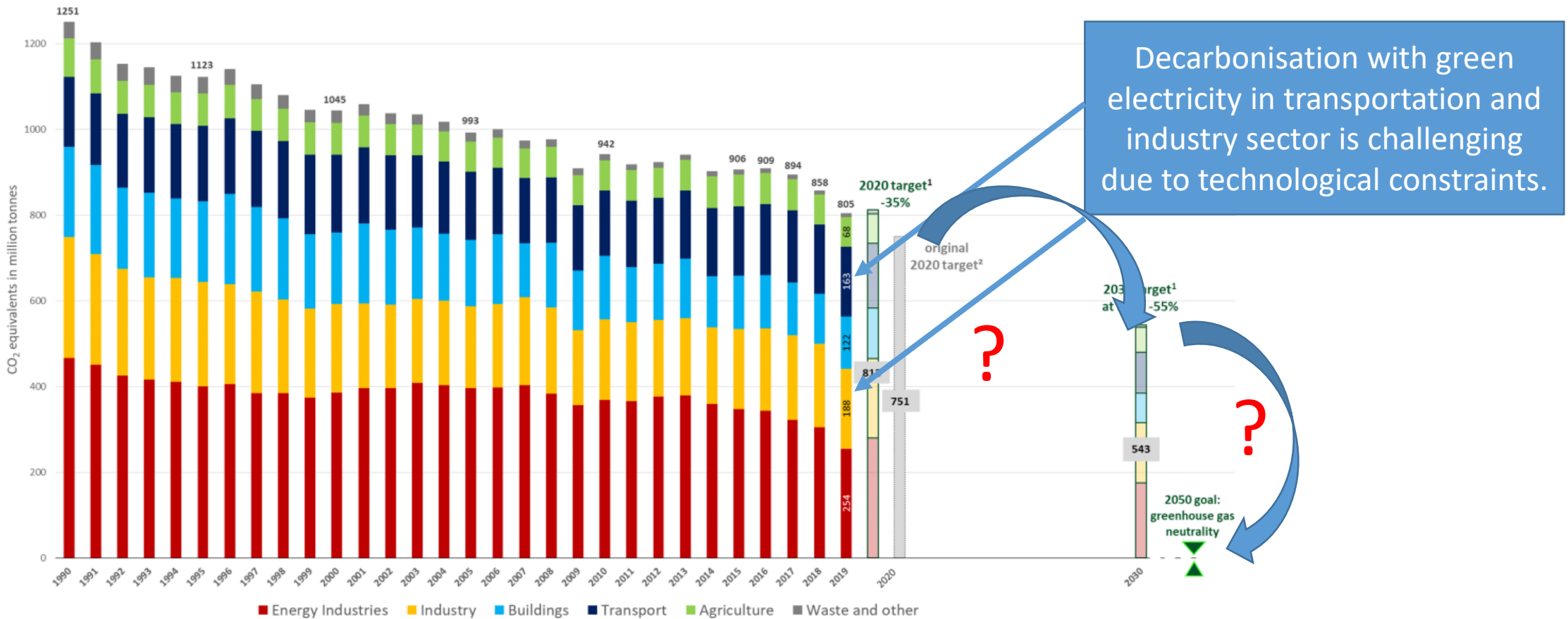


From where we come

Climate policy

Greenhouse gas emission trends in Germany by sector 1990-2019

Data: UBA 2020.

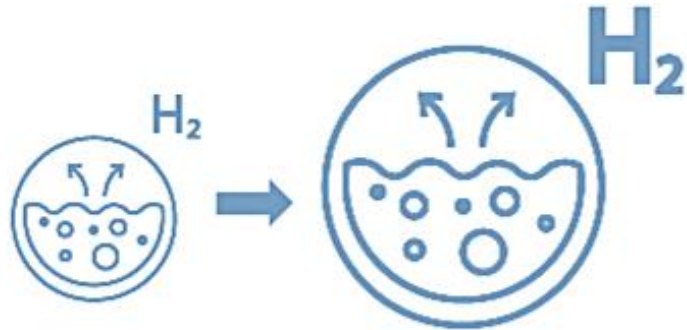


1) 2020 and 2030 targets as stated in the Climate Action Law.
2) The German government abandoned its original 2020 target with the introduction of the Climate Action Law in 2019.



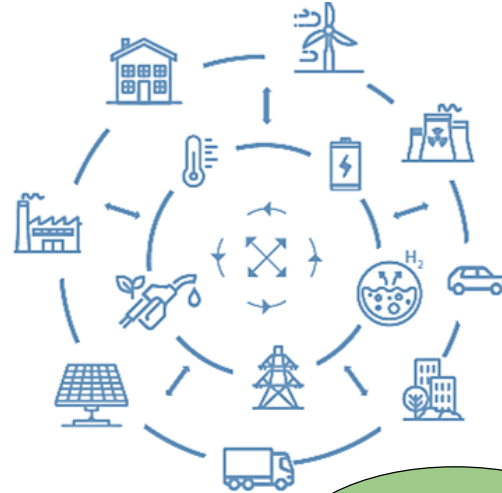
From where we come

European H2 strategy



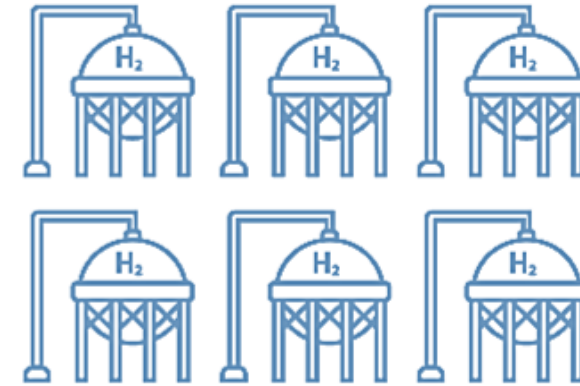
**Until
2024**

Market activation:
Installation of 6 GW
electrolyser capacity at least
(up to 1 Mill. tons of green
hydrogen)



**Until
2030**

Market development
Installation of 40 GW
electrolyser capacity at least
(up to 10 Mill. tons of green
hydrogen)



**Until
2030**

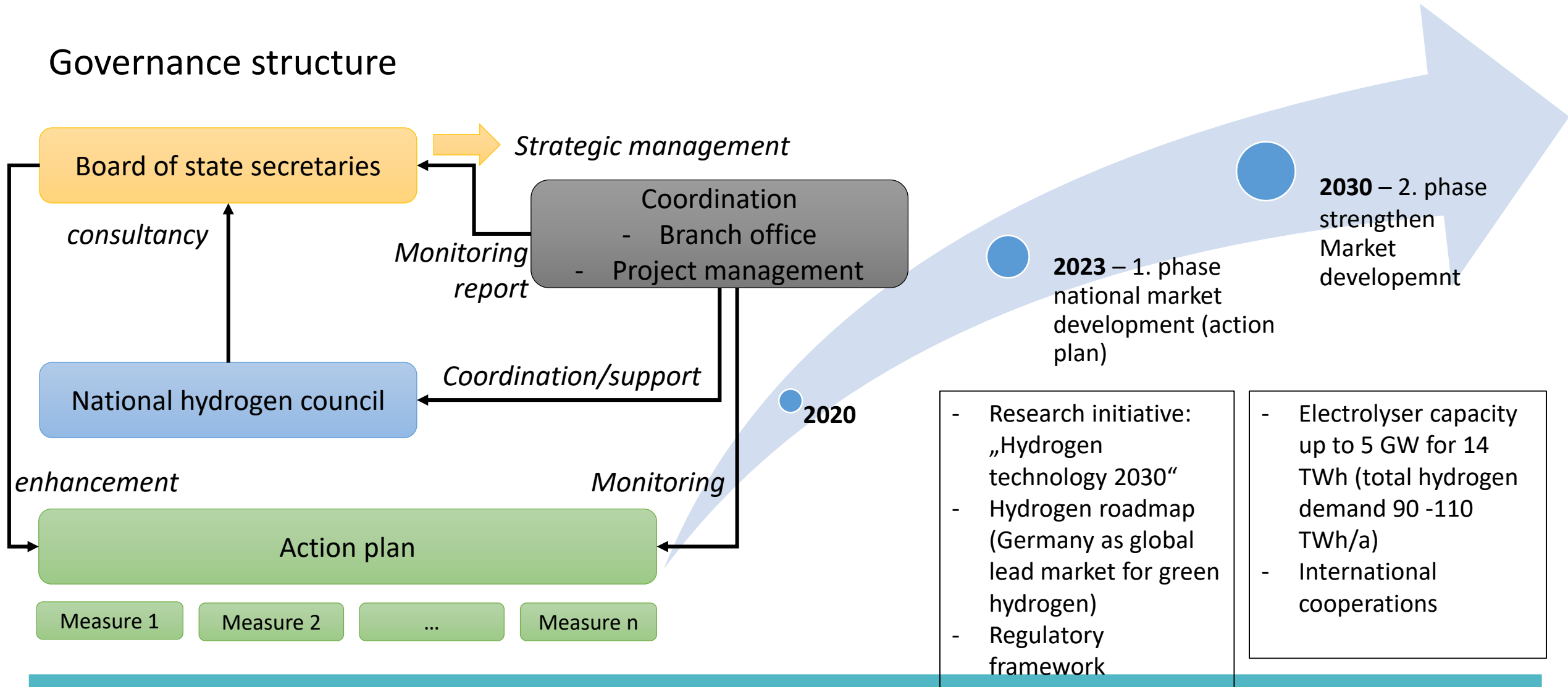
Establishment of a market
based on usage of green
hydrogen, that is competitive
to grey hydrogen



From where we come

German H2 strategy

Governance structure



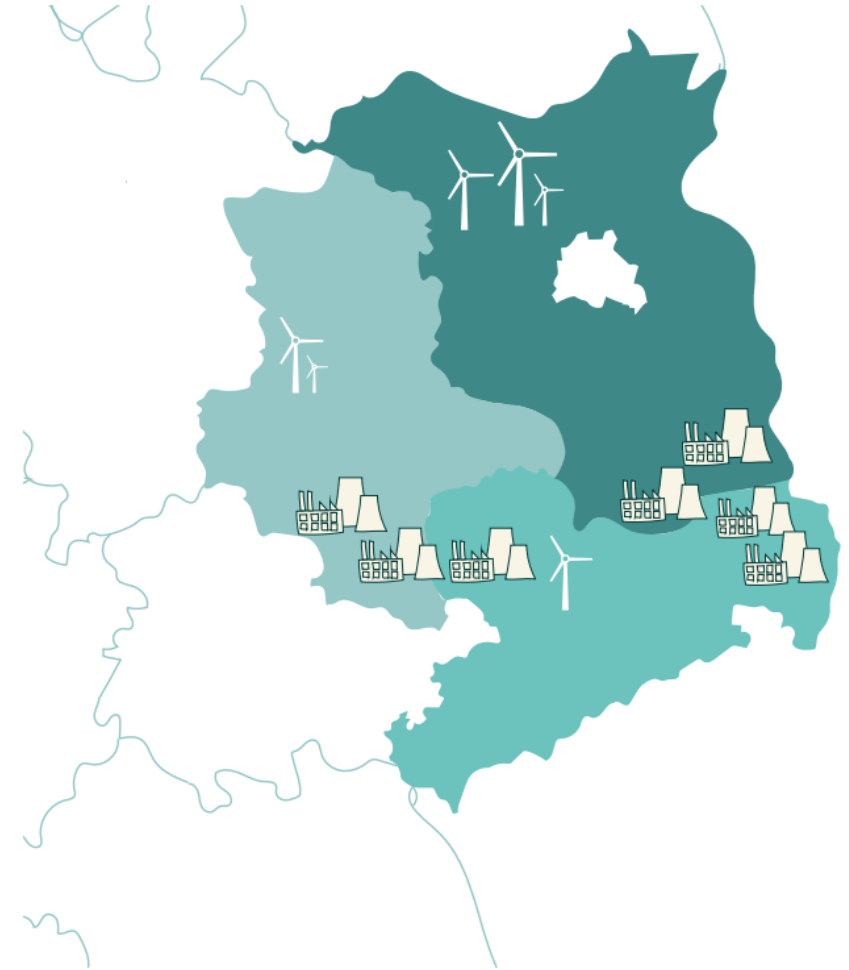


From where we come

H2-Concept of East German coal regions

Key statements

- Coal phase out as chance for the regions
- Joint approach of the three regions (Saxony, Brandenburg, Saxony Anhalt) to support the development of a green hydrogen economy to create new jobs and added value
- Preservation of the energy and industry sites
- Longterm goal: green hydrogen (no H2 generation technology preferences in the transition process)
- Support of regulatory framework on national and European level



Eckpunktepapier der ostdeutschen
Kohleländer zur Entwicklung einer
regionalen Wasserstoffwirtschaft

Sachsen Sachsen-Anhalt Brandenburg



Content



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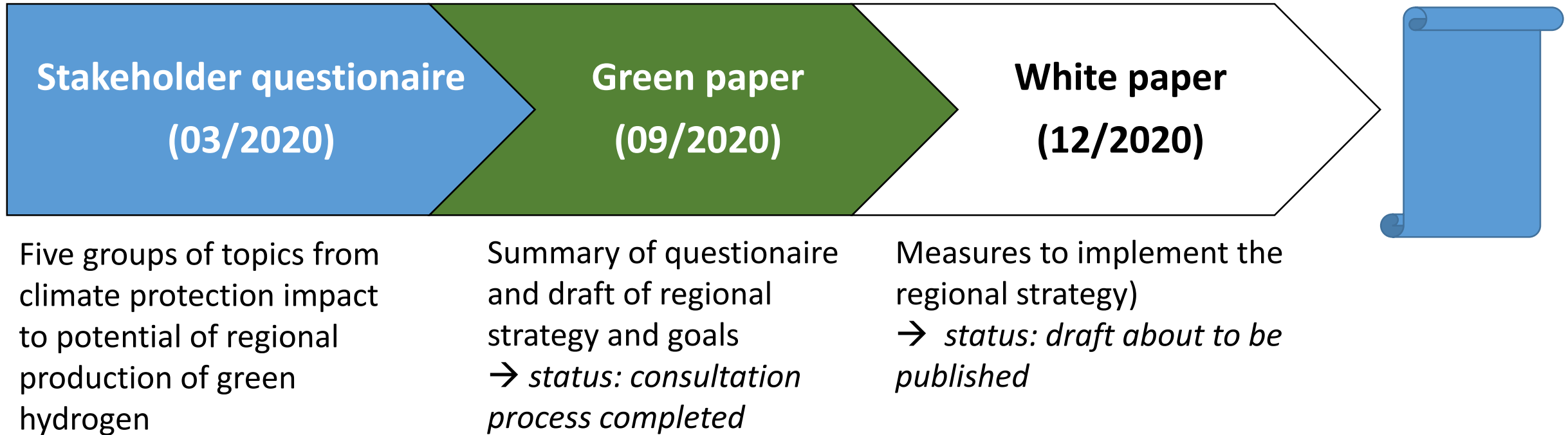
...to where we go.

- Regional H2 strategy
 - Process
 - Green paper
 - White paper



...to where we go.

Regional H2 strategy of Saxony Anhalt – process



Interdepartmental task force



...to where we go.

Green paper – Regional goals



until 2030:

- At least 1 GW electrolyser capacity (at least 5 TWh of green hydrogen close to the demand sites to substitute grey hydrogen)
- Additional renewable generation capacity from wind and solar power (5.000 MW)
- Partial extension of existing and new local hydrogen distribution system to connect additional generators and users of green hydrogen
- Support of E&D (infrastructure, projects) and specialised staff
-



until 2040:

- Regional hydrogen demand covered by climate neutral hydrogen (competitive prices),
- Large scale H2 production
- Continuous extension of renewable energy capacity considering the area potential ,
- Connection of the regional hydrogen distribution grid to the national and European grid
- Establishment of hydrogen hubs (cavern storages)
- Area-wide and cross-sectoral supply of hydrogen, including public transport



...to where we go. Green paper – Broad participation

Consultation workshop





...to where we go.

White paper – Measures

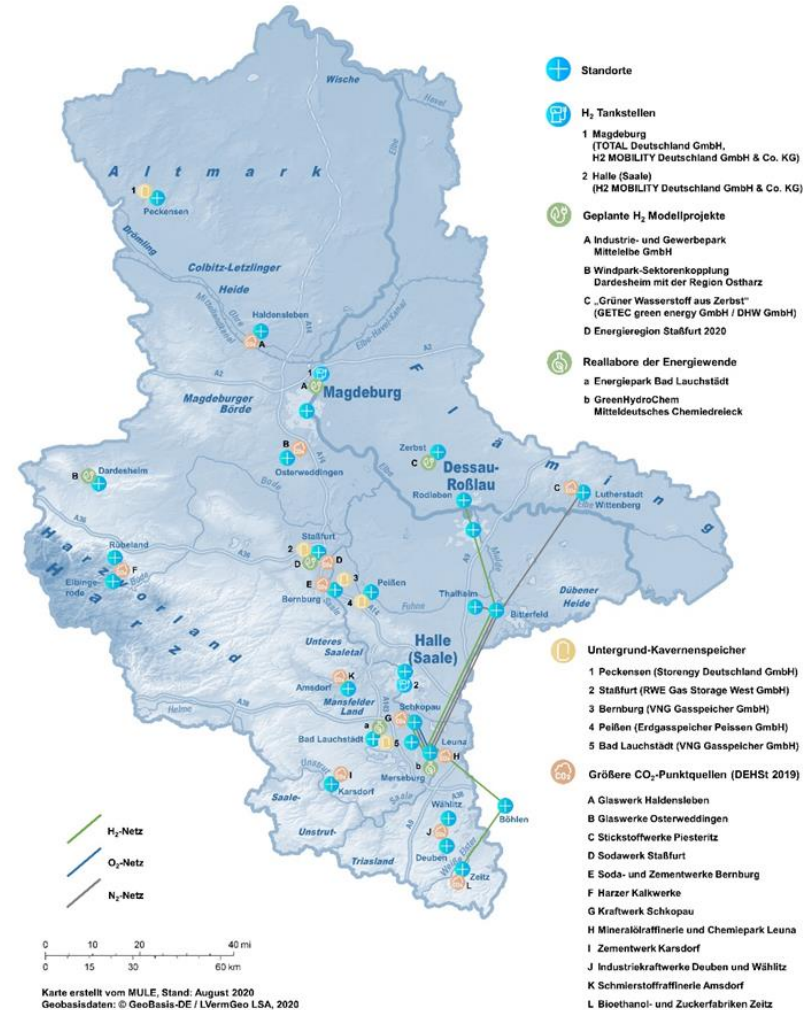


Weißbuch zur Entwicklung einer Wasserstoffstrategie für Sachsen-Anhalt

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...to where we go. Regional H2 strategy

Further steps

- Regional H2 strategy determined by the federal state government
- Implementation process





Thank you for your attention.



Jules Verne

I believe that water will one day be employed as fuel, that hydrogen and oxygen which constitute it, used singly or together, will furnish an inexhaustible source of heat and light, of an intensity of which coal is not capable.

AZ QUOTES