



PROSPECT2030 Webinar

Saxony Anhalt – Energy Plan

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Content

- Climate and Energy concept "KEK"
- Hydrogen strategy







KEK – Political Process...the beginning.

- Coalition agreement (2016 2021): common goal: reduction of GHG emissions to 31,3 Mill. t CO₂ eq/a until 2020 → New Climate and Energy Concept ("KEK")
- KEK-process started January 2018
 - external support from scientific institution
- Several Stakeholder conferences, continuous contribution
- Public consultation starting in September 2018 including an online contribution process and two conferences in Halle and Magdeburg
- Final draft and publication in February 2019
 - Five measure groups with 71 measures in total to reduce effectively GHG emissions (2020/2030)
 - "KEK" dares a perspective to 2050 ("Saxony-Anhalt will be decarbonised until mid-century.")





KEK – Political Process...follow-up.

- Departements are responsible to realise the measures.
- Implementation of a controlling mechanism to monitor the realisation of the measures -> implemented and operated by MULE, regional energy agency (LENA) and state office for environmental protection (LAU)
- → Annual monitoring report.





Source: https://www.wpcruisecontrol.com/benefits-of-24-7-website-monitoring-services/



MULE measures

Measure group A – energy sector

- Exemplary initiatives within this measure group:
 - ERDF support programm "Sachsen-Anhalt Energie" (energy efficiency in companies) – increase of the availabe public fund (already implemented, plus 10 Mill. €)
 - Next ERDF period: Support programm for sector coupling projects in Saxony Anhalt (main focus: green hydrogen production and use) (in preparation)



Sample measure: Wind energy extension

Source: https://ingenuity.siemens.com/2019/08/sector-coupling-power-to-x-technologies-shaping-an-integrated-green-energy-system/



Measure A 2.1: Development of wind energy



Measure A 2.1		De	evelopment wind energy		
Indicator: Net installed power extension since 2018 based on					
official register of the national regulator					
("Bundesnetzagentur")					
	Indicated value		GHG emission reduction		
	Installed power		compared to 2018		
	Extension	1			
Status 2019:	33 MW		54 083 t CO ₂ e		
—	44= 3.40		100 100 100		
Target 2020:	115 MV	V	169 438 t CO ₂ e		

Source: Wikipedia, CC BY-SA 4.0



Measure group B – Energy efficiency in buildings

 Measure B 1.1 – Climate protection and energy efficiency in settlement development

Support programm "IGEK"

Measure B 2.6 – Photovoltaic on roofs
 Support programm for electric storages in combination with PV (limited to 30 kW_{peak})



Source: https://www.bmwi.de/Redaktion/DE /Artikel/Energie/mieterstrom.html



Measure B 2.6: Photovoltaic on roofs (mainly on apartment building in urban areas)



Measure B 2.6	Photovoltaic on roofs	
	(mainly on apartment building in urban	
	areas)	

Indicator: Net installed power extension of PV since 2018 (official register from national regulator)

	Indicated value	GHG emission
	installed power	reduction compared
	extension	to 2018
PV on buildings		
Status 2019	173 MW	174 763 t CO ₂ e
PV on buildings		
Target 2020	248 MW	250 259 t CO ₂ e ³

Source: Wikipedia, angepasst, CC BY-SA 3.0



MULE measures

Measure group C – Transportation

Measure C 2.1 – Support of cycling

Planned: Extension of support programm to build new bicycle roads

Measure C 2.3 – Relocation from private to public transportation
 Planned: More financial support to make public transportation more attractive







Measure group D – Economy

- Measure D 1.1 Support of energy efficiency in water supply and waste water facilitites Extension of existing support programm (ERDF fund of 16 Mill. Euro)
- Measure D 2.1 Improvement of material and ressource efficiency as well as circular economy



Waste water facility Raguhn-Zörbig

- Monitoring and advancement of the guideline "Reuse and utilization of mineral waste" and practical application
- Measure D 2.2 Substitution of energy-intensive materials and processes

Advancement of existing ERDF support programm ("Sachsen-Anhalt KLIMA II")



Measure group E – Agriculture/ Land Use/ Forestry and Food

- Measure E 4.4 Productive and climate change resistant forests
 Stabilization and risk limitation in the existing stands as well as forest conversion
 - in accordance with the site mapping currently being revised and the extended inventory target type catalog based on the forest guideline
- Planned:
 - Extended financial support to climate change adaption and sink performance of the forest management
 - Development of a bog protection strategy



Source: https://www.mz-web.de/sachsen-anhalt/-der-wald-stirbt-nicht--wie-sachsen-anhalt-den-forstbesitzern-helfen-will-32932954



Hydrogen strategy Saxony Anhalt

Regional strategy for hydrogen production and usage

- Three-step process
 - Stakeholder questionaire (five groups of topics from climate protection impact to potential of regional production of green hydrogen)
 - Green paper (Summary of questionaire and draft of regional strategy and goals)
 - → status: consultation process completed
 - White paper (Measures to implement the regional strategy)
 - → draft about to be published
- Cabinet decision about the regional H2 strategy at the end of 2020





Hydrogen strategy Saxony Anhalt

Regional strategy for hydrogen production and usage

- Some substantial regional goals until <u>2030</u>
 - 1 GW electrolyzer capacity for green hydrogen production at least
 - Additional wind and solar power of about 5.000 MW
 - Extension of the existing H2 grid
- Some substantial regional goals until <u>2040</u>
 - H2 demand covered by climate neutrale H2 zu competitive costs
 - Upscaling of regional H2 production (adding value)
 - Connection of regional H2 grid to transeuropean H2 grid





Thank you for your attention.