



> A Vision over RES in Romania

“Renewable Energy in Romania - Opportunities and Challenges of the Clean Energy Package” - EUFORES

22nd March 2018

Martin MOISE



D 2009/28/EC

Law 220/2008

10

years

3.150 MW



1.350 MW



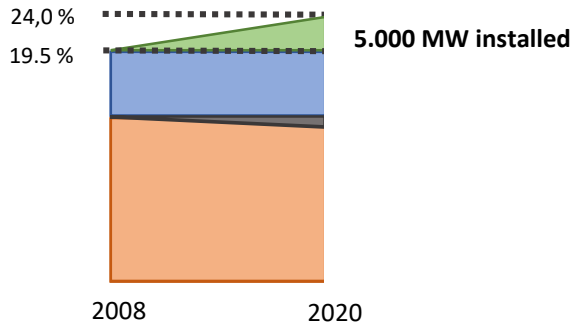
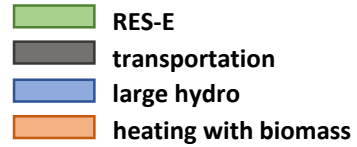
350 MW



150 MW



Target 2020



2030

Law 220/2008

06.11.2008 – Mof I nr 743/2008

12.07.2010 – Legea nr 139/2010
13.08.2010 – Mof I nr 577/2010
03.09.2010 – OG nr 29/2010

19.10.2011 – OUG nr 88/2011

26.07.2012 – Legea nr 134/2012

01.07.2013 – OUG nr 57/2013
01.07.2013 – OUG nr 79/2013

01.01.2014 – Hot nr 994/2013
17.03.2014 – OUG nr 57/2013

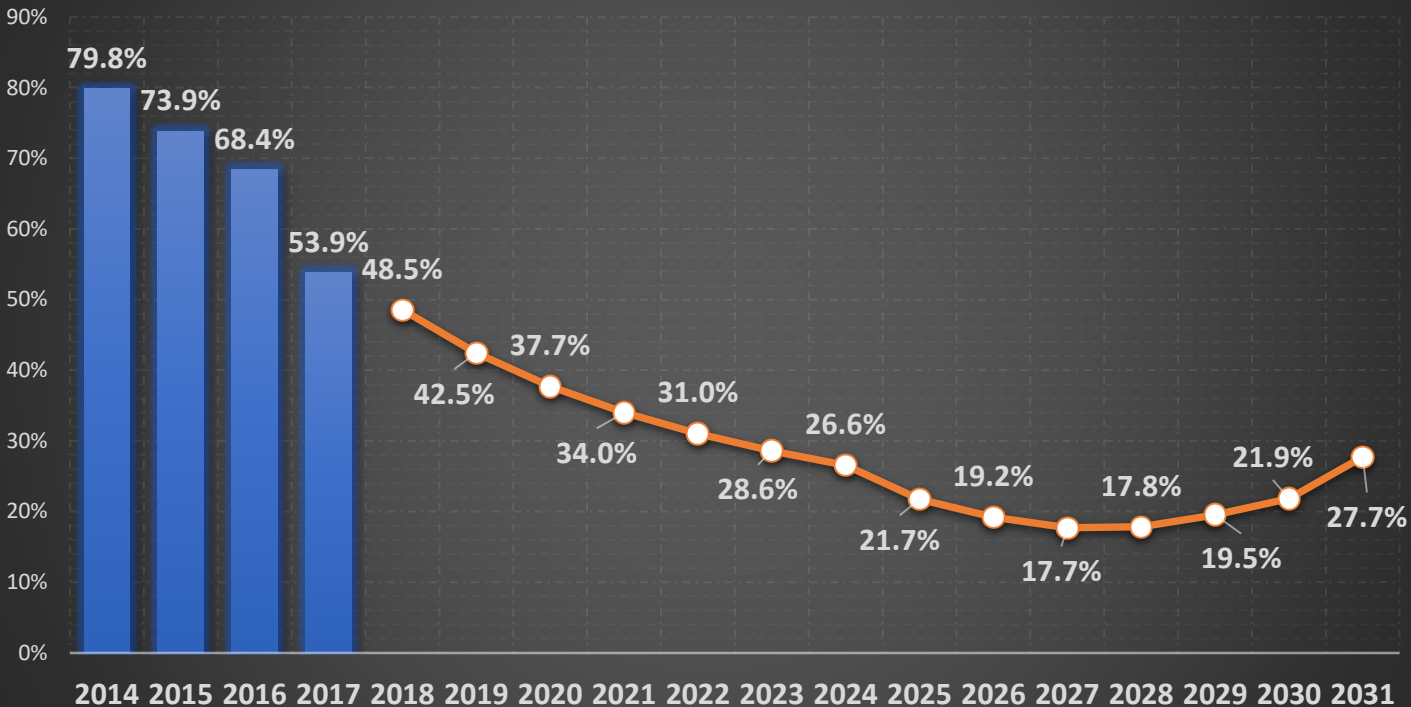
06.06.2015 – Legea nr 112/2015

30.06.2016 – OUG nr 39/2016

31.03.2017 – OUG nr 24/2017

30.04.2018 - ?

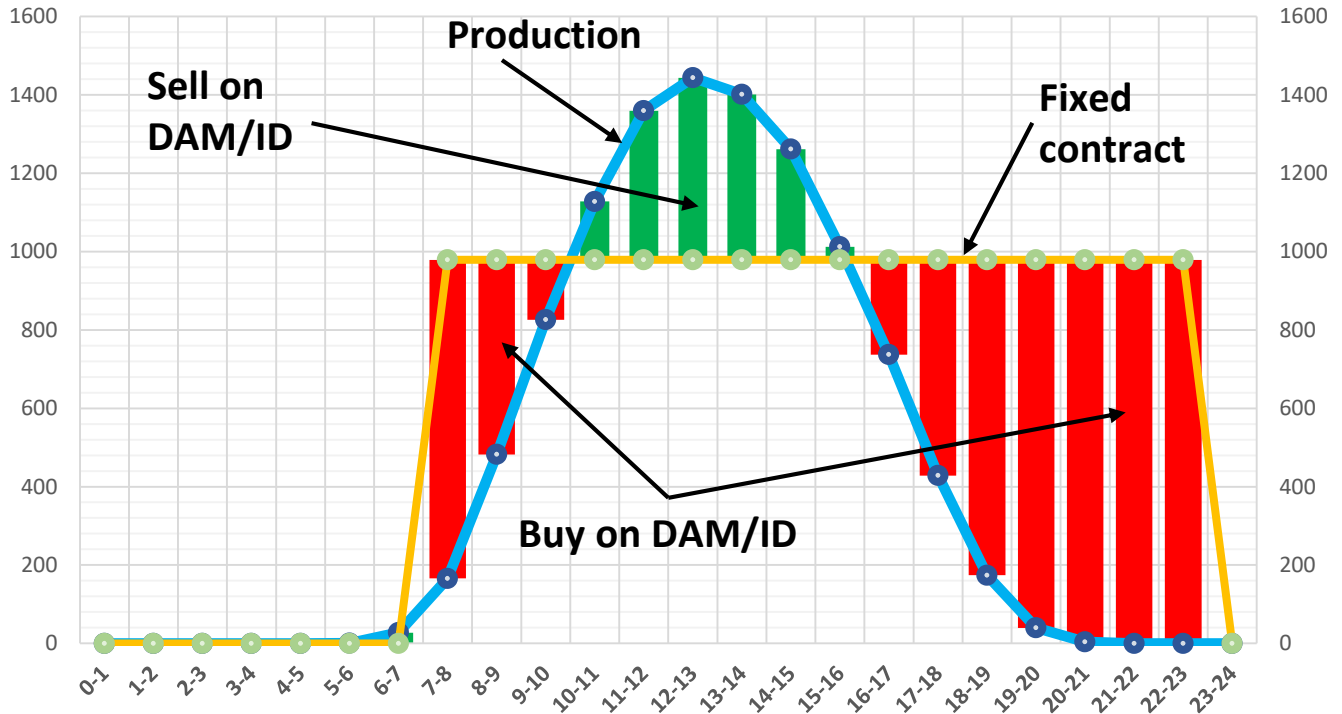
GC Coverage



Actual GC coverage

Planned GC coverage

Selling electricity





well below 2 degrees



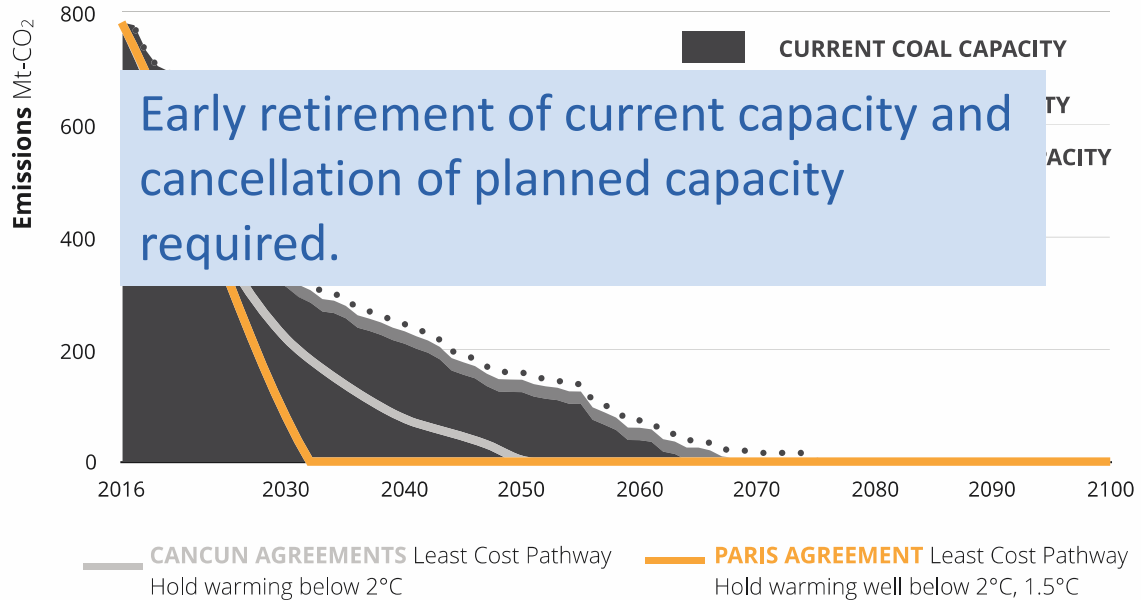
3 “d”

A silhouette of an industrial facility, including several tall smokestacks and two large cooling towers, set against a dramatic sky at sunset or sunrise. The sky is filled with vibrant orange, red, and blue clouds. Thick plumes of dark smoke or steam are rising from the smokestacks. The entire scene is in silhouette, with the light source behind the buildings.

decarbonize

Emissions resulting from coal-based power generation capacity vs. PA budget

EUROPEAN UNION potential CO₂ emissions from existing and planned coal capacity against least-cost pathways



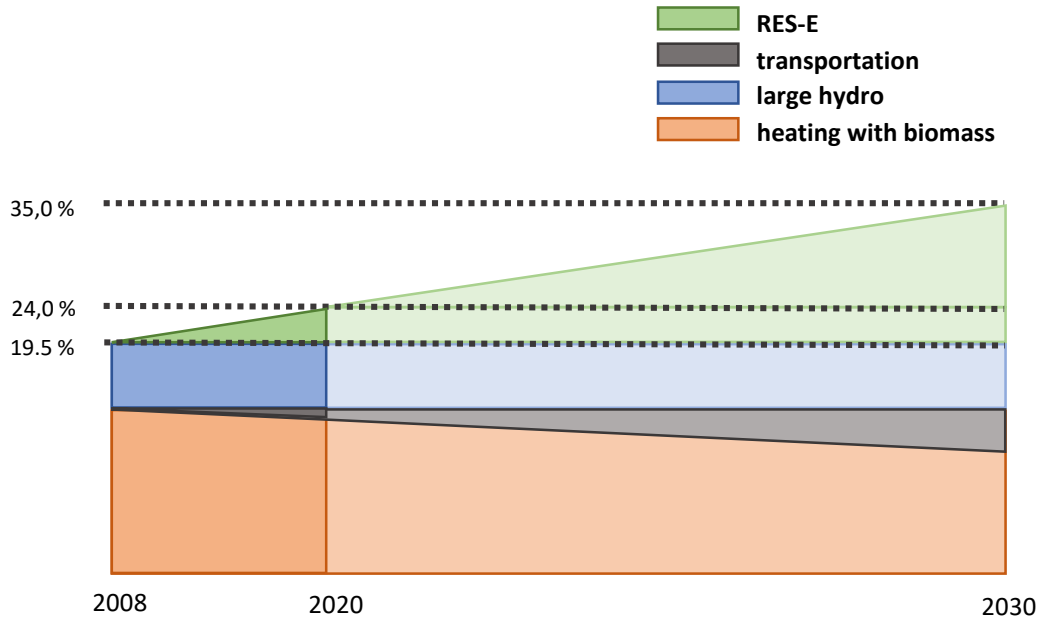
An aerial photograph of a residential neighborhood featuring numerous two-story brick houses. Many of the houses have solar panels installed on their roofs. A large green field is visible in the center of the neighborhood, and a road winds through the area. The word "decentralize" is overlaid in a white box on the right side of the image.

decentralize



digitize

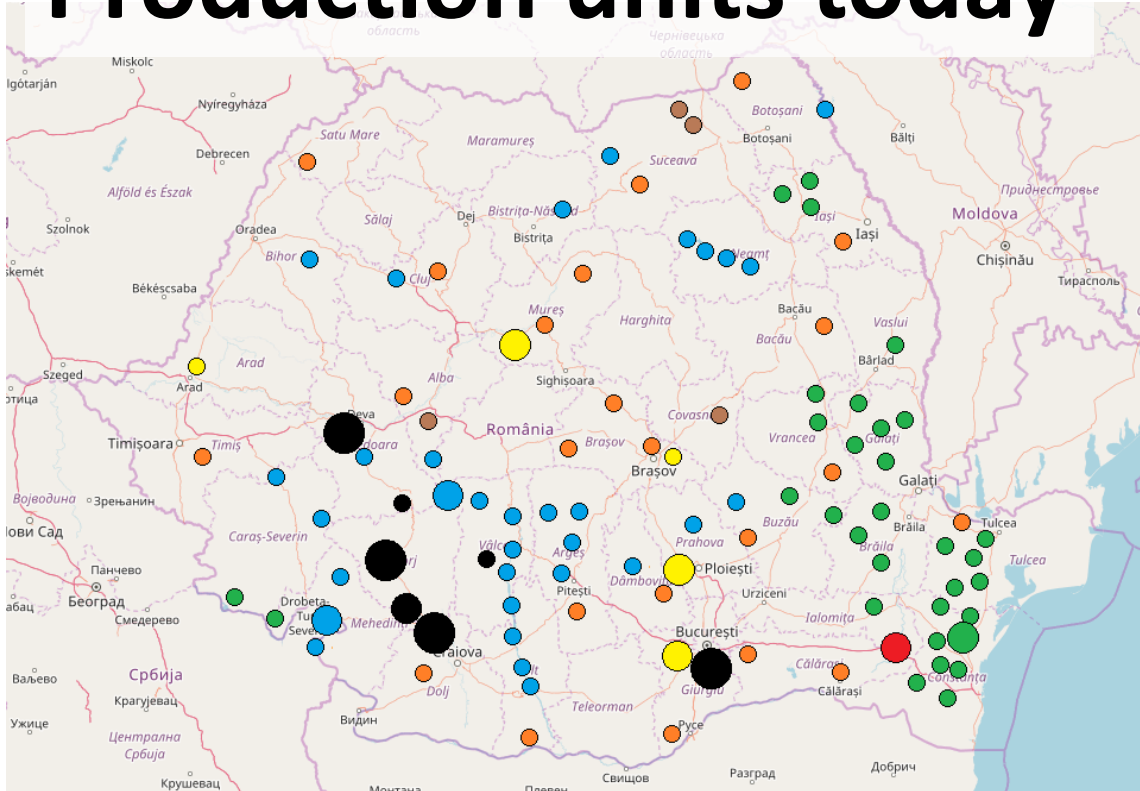
Target RO 2030 – 35%?



Max. potential RES

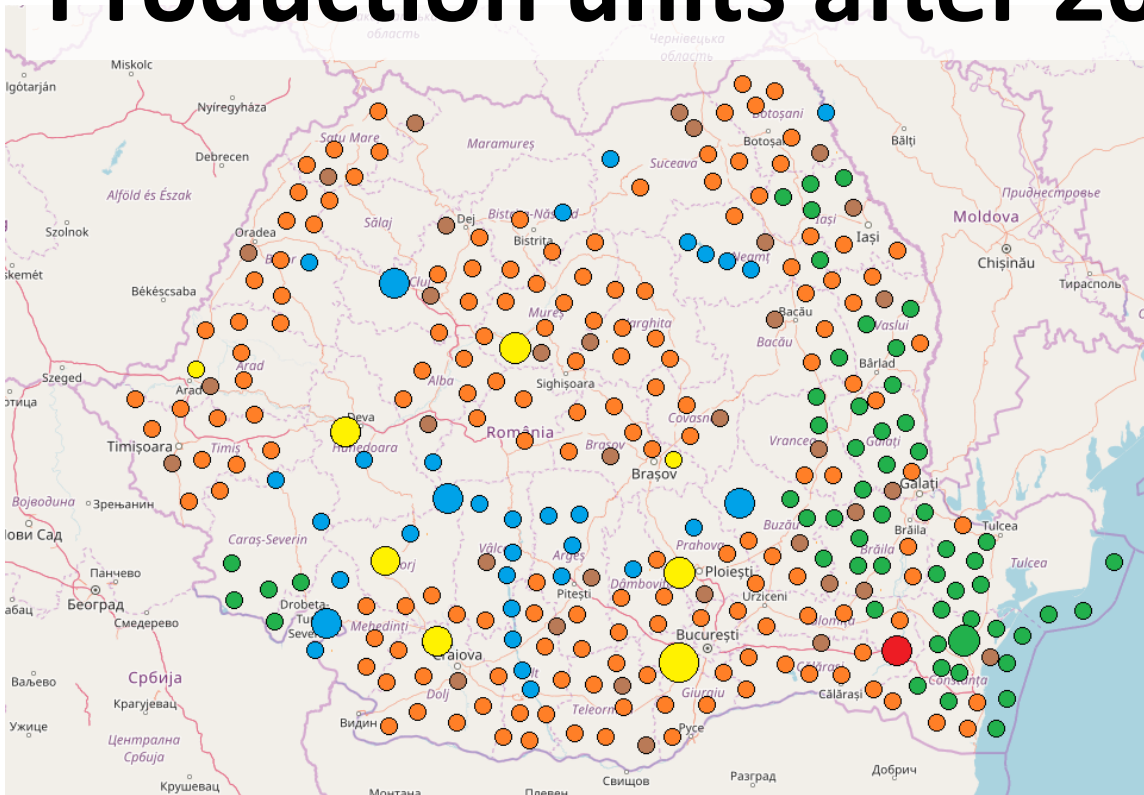
Power plant technology	Today [MW]	Until 2030 [MW]	Until 2050 [MW]
<i>Wind onshore</i>	3156	+10606	+12084
<i>Wind offshore</i>	0	+3115	+3500
<i>Solar ground-mounted</i>	1375	+15971	+19476
<i>Solar rooftop</i>		+31593	+35481
<i>Hydro - lakes</i>		+709	+798
<i>Hydro - river</i>	6761	+3071	+3195
<i>Hydro - pumping</i>		+1361	+1361
<i>Geothermal</i>	0.05	+41	+63
Total	11292	+66467	+75958

Production units today

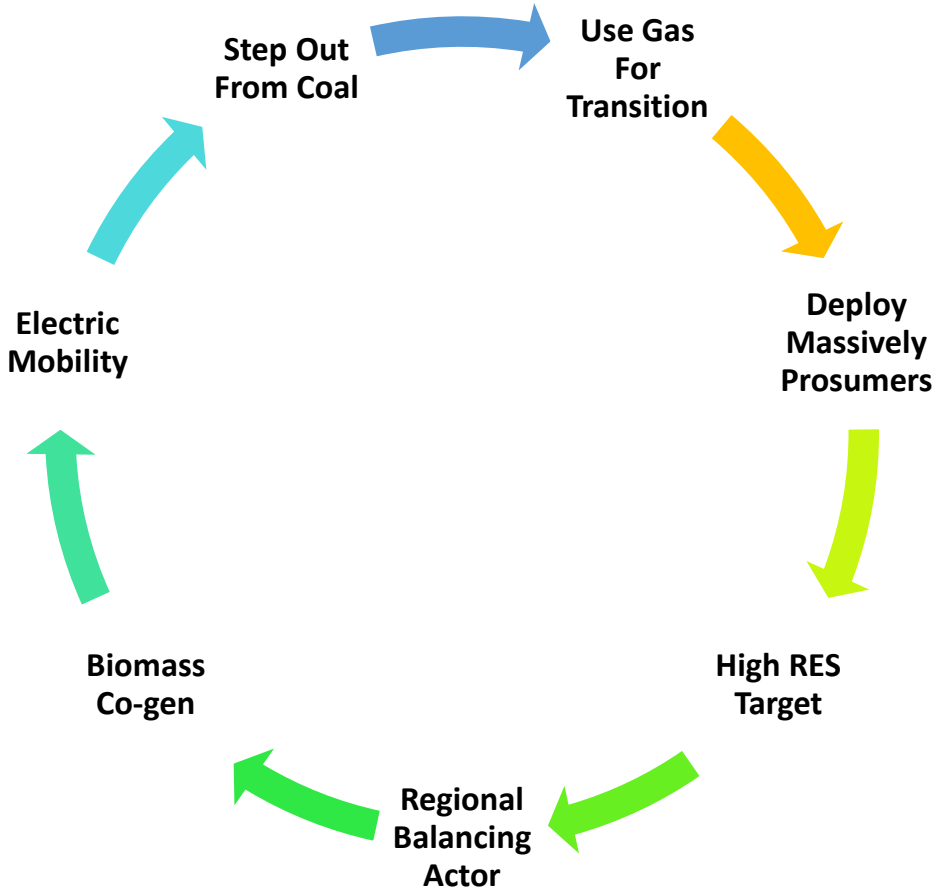


- Legend:**
- - coal
 - - gas
 - - hidro
 - - solar
 - - wind
 - - biomass
 - - nuclear

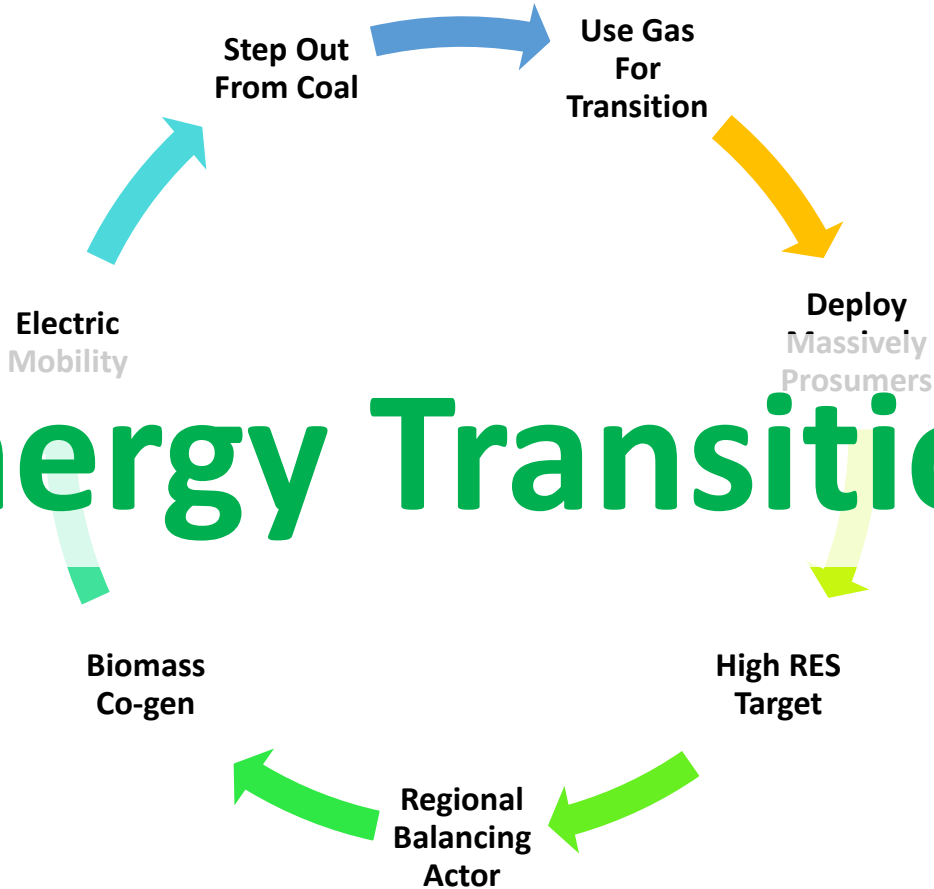
Production units after 2030



- Legend:**
- - coal
 - - gas
 - - hidro
 - - solar
 - - wind
 - - biomass
 - - nuclear



Energy Transition





> Thank You!!

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