

# Geology and the Energy Transition

23 MAY 2019

Delft // the Netherlands



CHPM2030



Vitor Correia  
President, EFG

**1** NO  
POVERTY



**2** ZERO  
HUNGER



**3** GOOD HEALTH  
AND WELL-BEING



**4** QUALITY  
EDUCATION



**5** GENDER  
EQUALITY



**6** CLEAN WATER  
AND SANITATION



**7** AFFORDABLE AND  
CLEAN ENERGY



**8** DECENT WORK AND  
ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



**10** REDUCED  
INEQUALITIES



**11** SUSTAINABLE CITIES  
AND COMMUNITIES



**12** RESPONSIBLE  
CONSUMPTION  
AND PRODUCTION



**13** CLIMATE  
ACTION



**14** LIFE  
BELOW WATER



**15** LIFE  
ON LAND



**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS



**17** PARTNERSHIPS  
FOR THE GOALS











Photo from Wikimedia Commons: The Yorck Project (2002) 10.000 Meisterwerke der Malerei (DVD-ROM), distributed by DIRECTMEDIA Publishing GmbH. ISBN: 3936122202



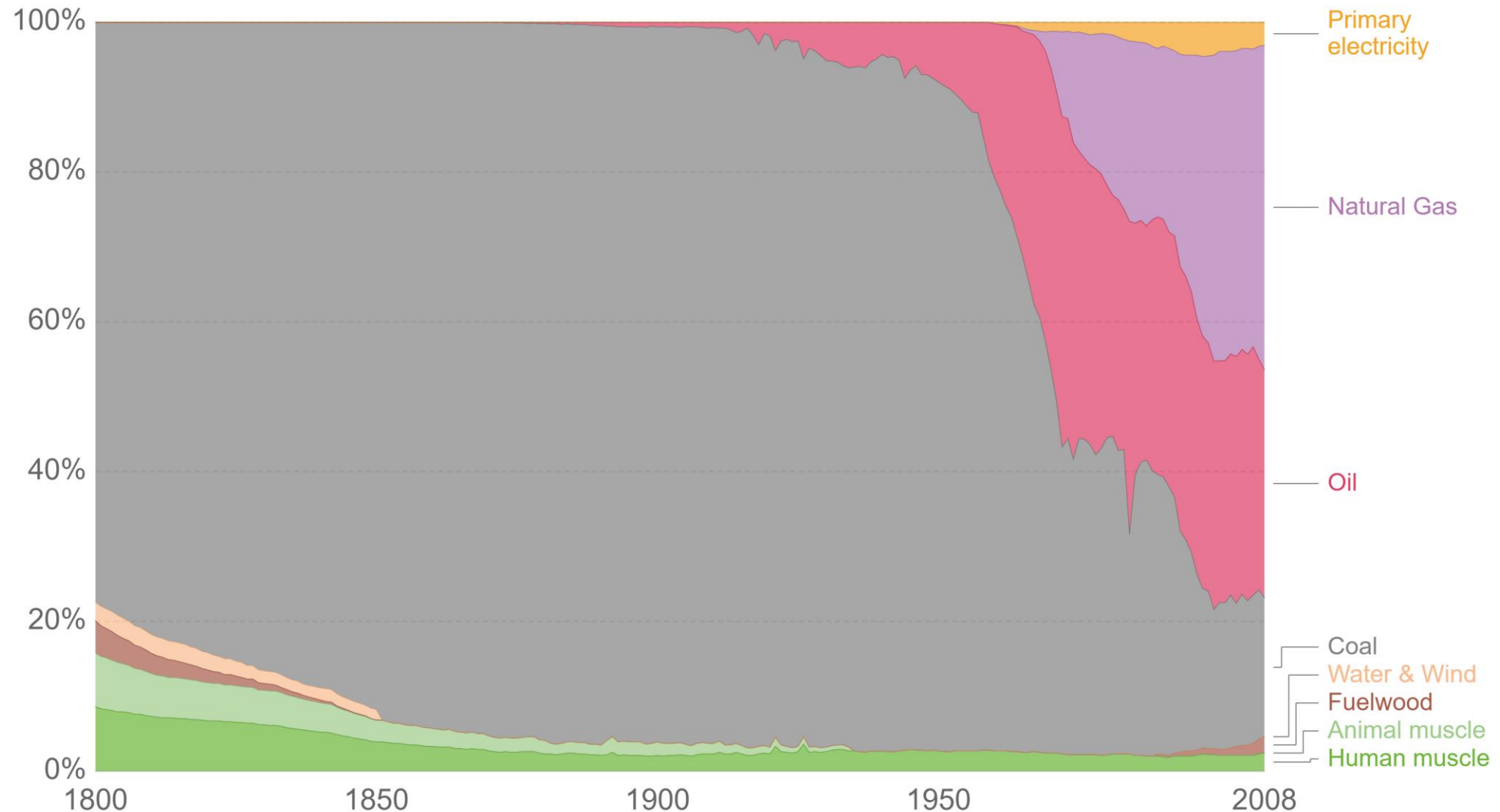


Dowlais Ironworks by George Childs (1840).

Photo retrieved from [https://en.wikipedia.org/wiki/Dowlais\\_Ironworks](https://en.wikipedia.org/wiki/Dowlais_Ironworks)

# Long-term energy transitions, England & Wales

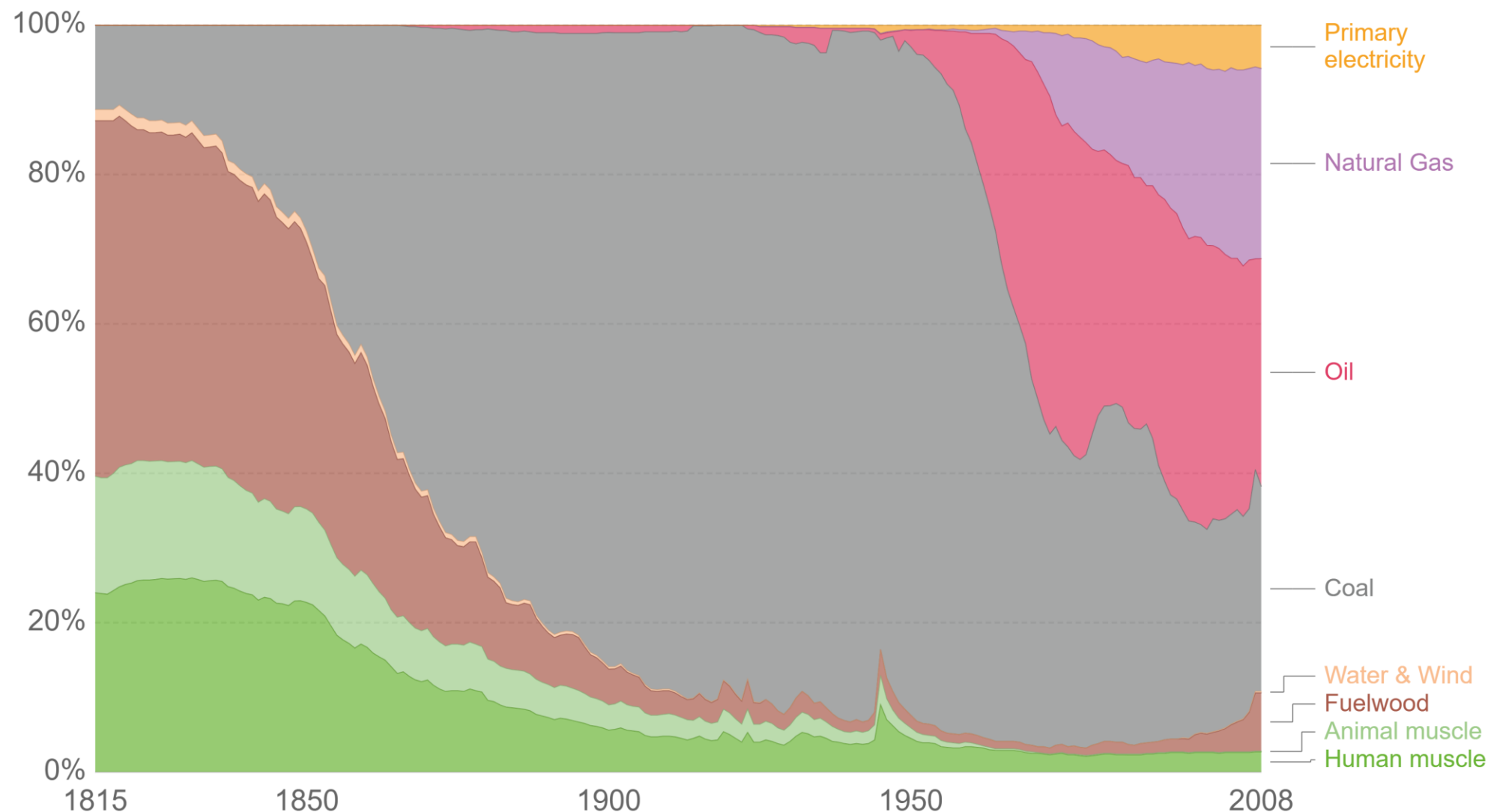
Share of primary energy by source over the long-term, measured as the percentage of total energy consumption. Primary electricity includes: hydropower, nuclear power, wind, photovoltaics, tidal, wave and solar thermal and geothermal (only figures for electricity production are included).





# Long-term energy transitions, Germany

Share of primary energy by source over the long-term, measured as the percentage of total energy consumption. Primary electricity includes: hydropower, nuclear power, wind, photovoltaics, tidal, wave and solar thermal and geothermal (only figures for electricity production are included).



# two factors that can hasten the fourth energy transition

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April 30, 2015



# two factors that can hasten the fourth energy transition

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Photo from David McNew/AFP, retrieved from <https://scroll.in/article/725876/can-elon-musks-wall-mounted-battery-solve-indias-power-crisis>

# two factors that can hasten the fourth energy transition

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August 20, 2018

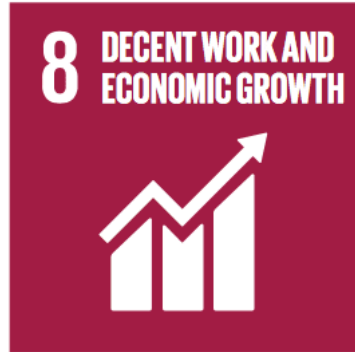


two factors that can hasten the fourth energy transition

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Image retrieved from <https://twitter.com/gretathunberg/status/1091710612831432706>







27

45000



## EFG Member

Click on the map

- Belgium-Luxembourg
- Bulgaria
- Croatia
- Czech Republic
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Netherlands
- Poland
- Portugal
- Romania
- Russia
- Serbia
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom



# Mission

promoting excellence in  
the application of  
geoscience

creating public  
awareness of the  
importance of  
geoscience to society

enhancing the  
cooperation between  
National Associations of  
geoscientists





Photo by Catalina Llano Ocampo; EFG / EAGE Geoscientists at work





Photo by SPIEGEL ONLINE 2013; Vattenfall's operations in the Lausitz region, retrieved from <https://www.spiegel.de/international/germany/energy-giant-vattenfall-presses-on-with-coal-mine-expansion-plans-a-930828.html>





2015

2018



2015





2018



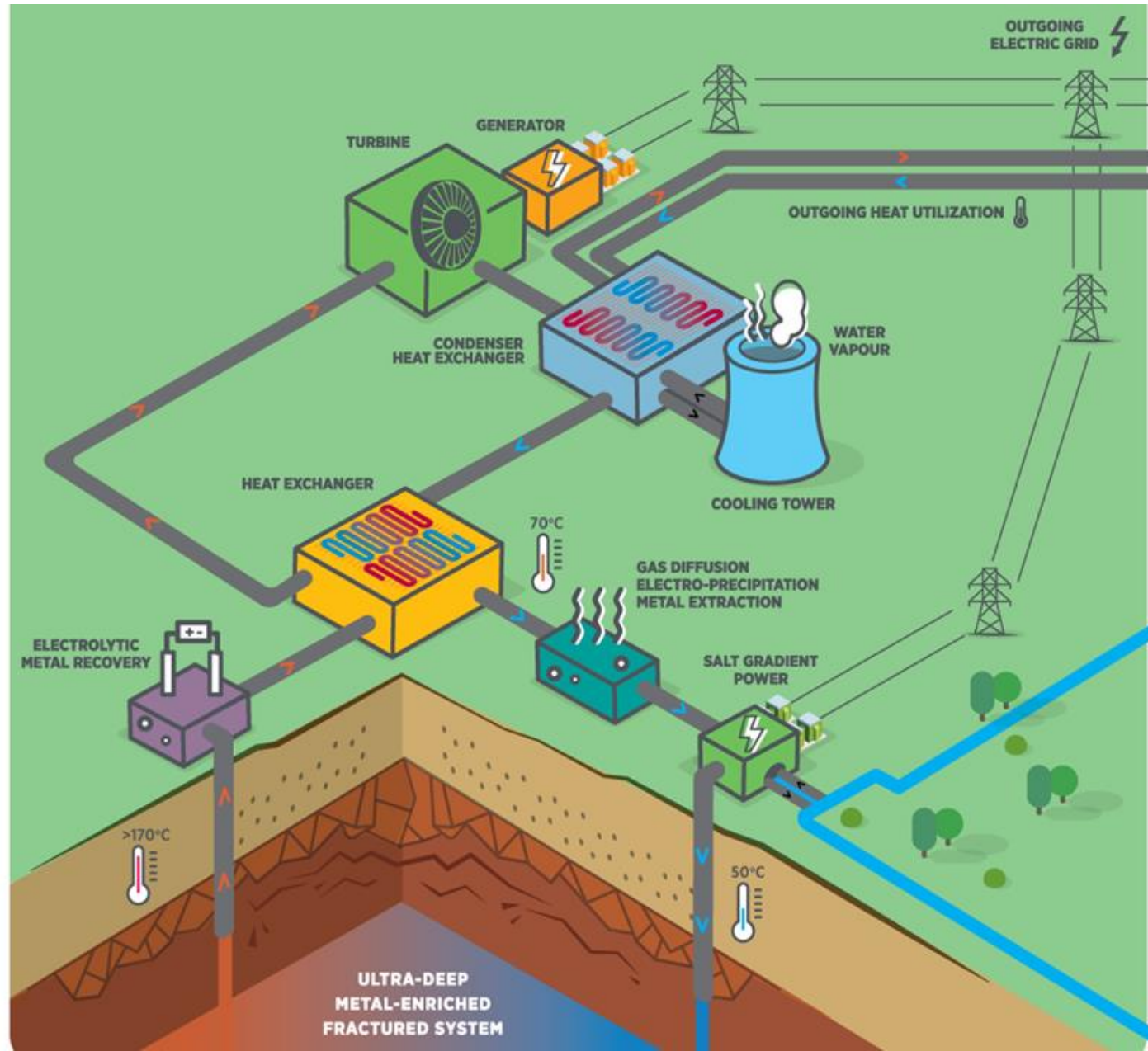


# Action Plans

1. Developing and a strong NAs network 
2. Participation in the global community and maintaining international networks
3. Promotion of professional excellence 
4. Enhanced geoscience communication and outreach
5. Provision of independent, trustworthy and reliable information on geoscientific issues
6. Participation in EU and international funded projects



# CHPM 2030





thank you

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