

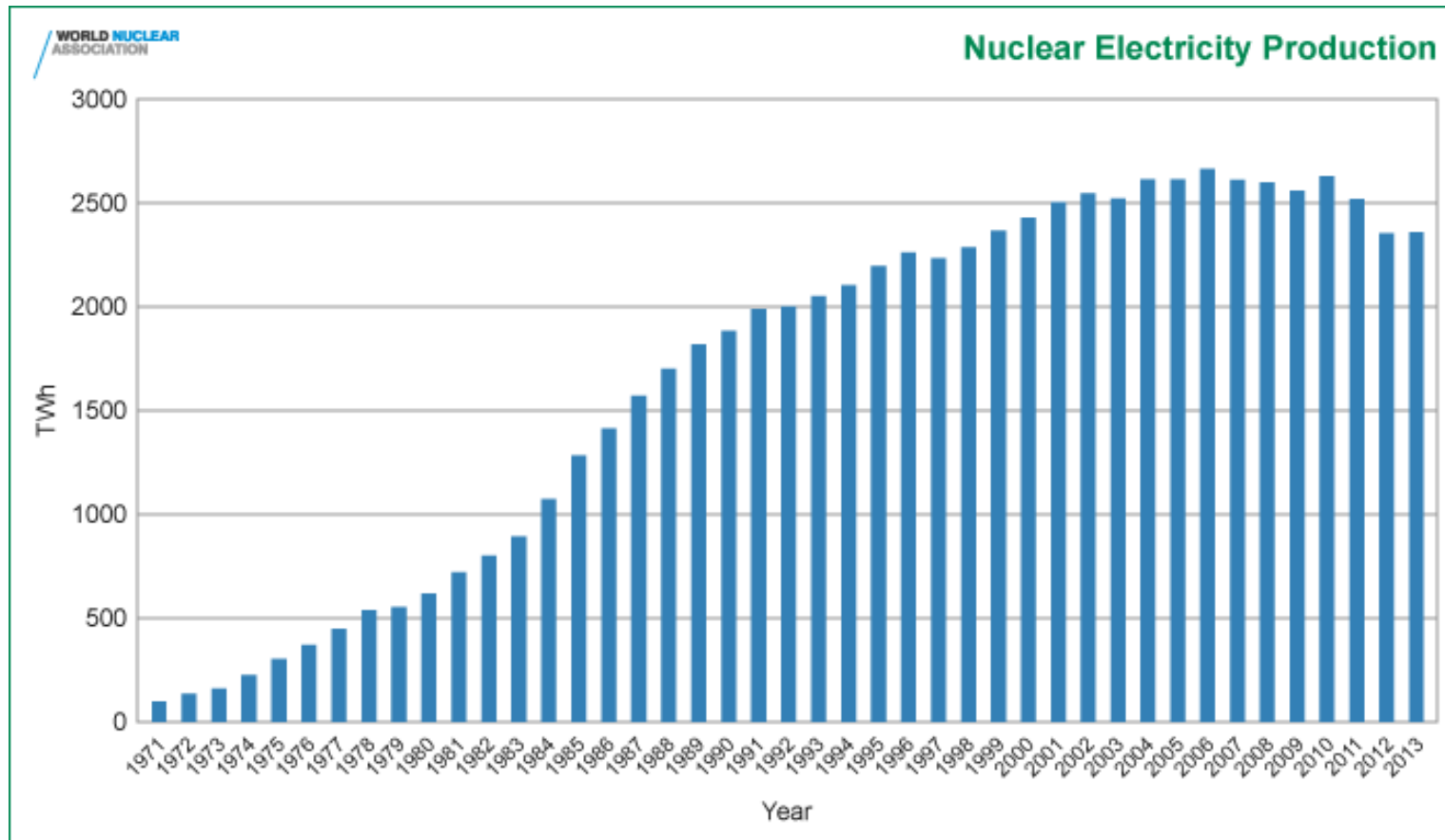
Balancing the Climate Budget. What Role Should Nuclear Energy Play?



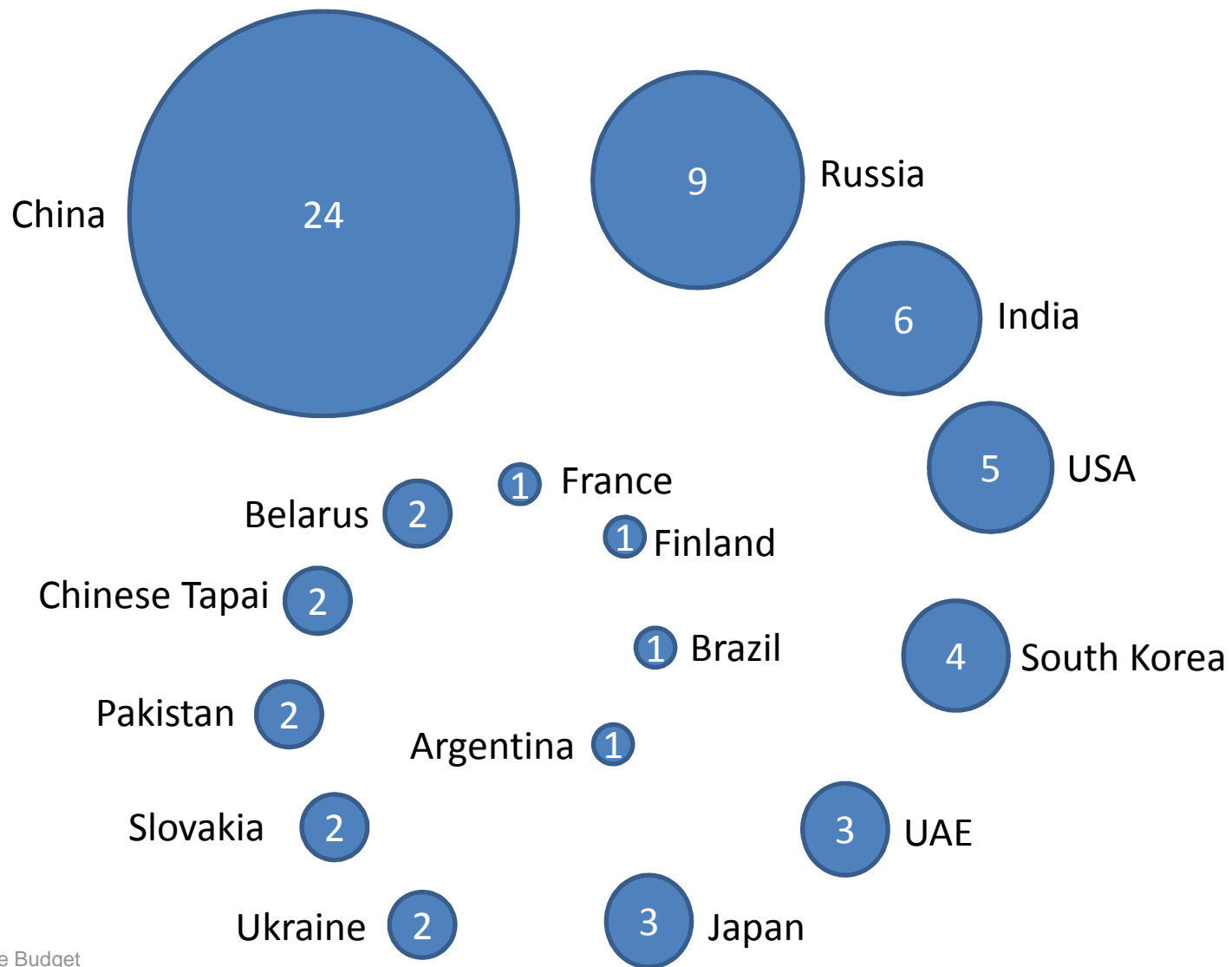
Agneta Rising
Director General

WiN Global Annual Conference
IAEA, Vienna
26 August 2015

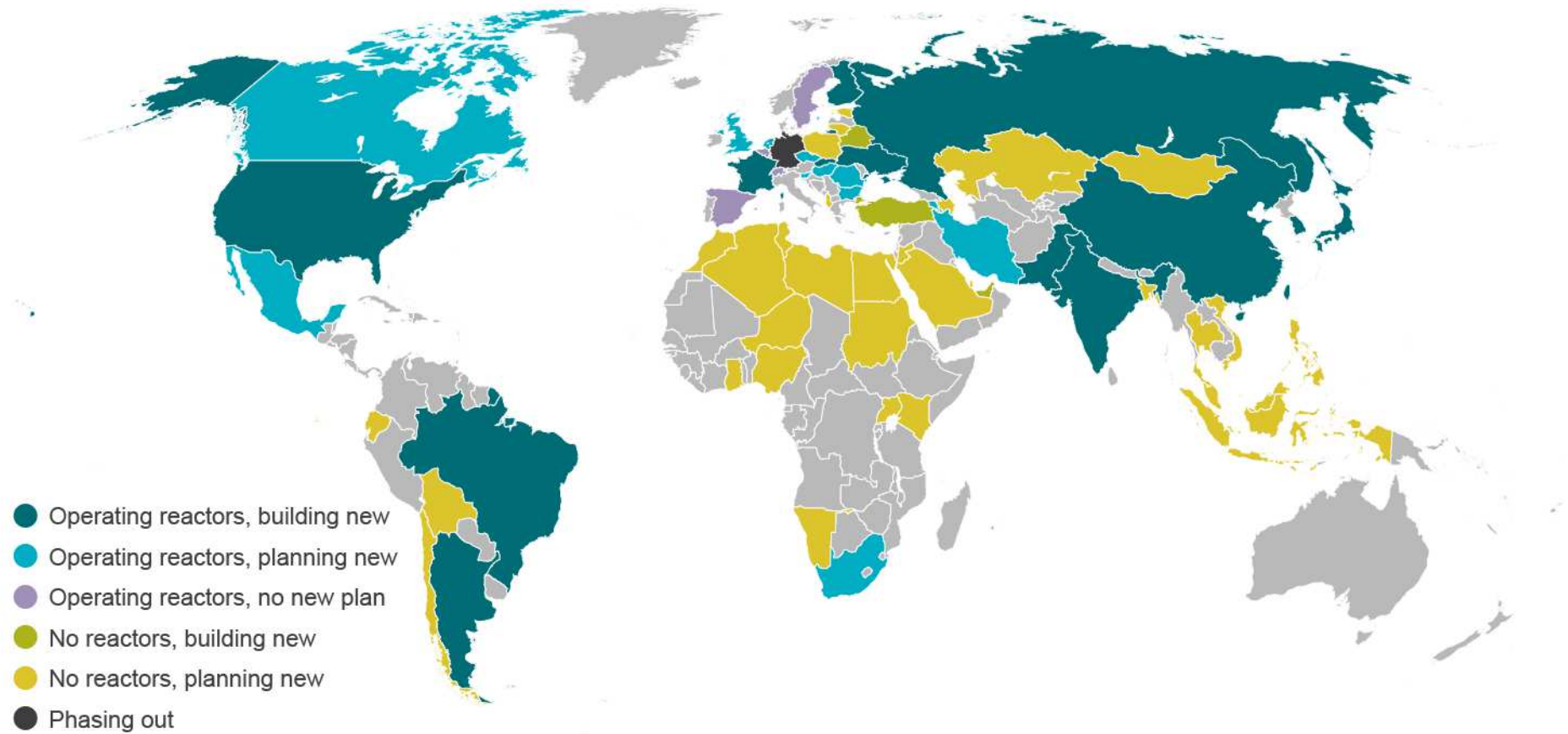
Global Nuclear Generation



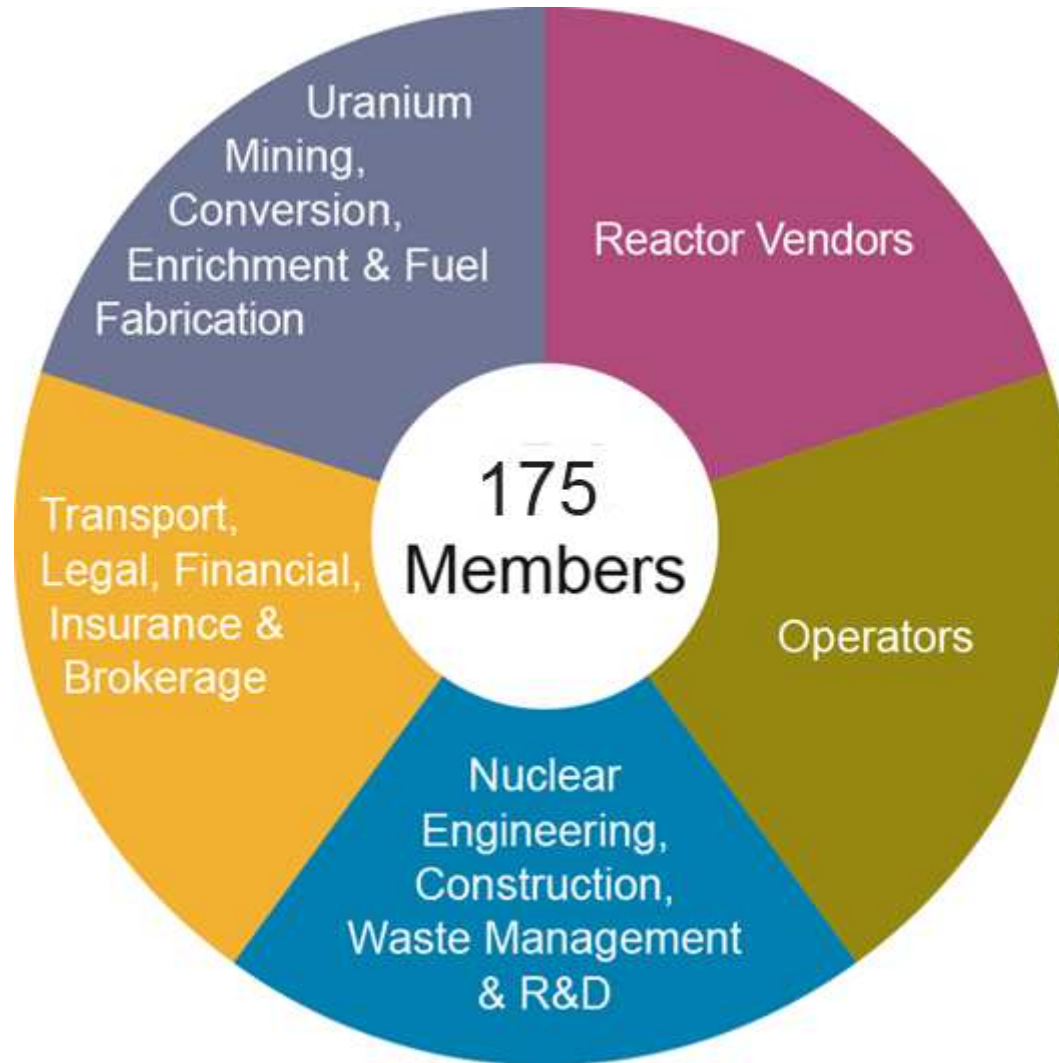
Reactors Under Construction



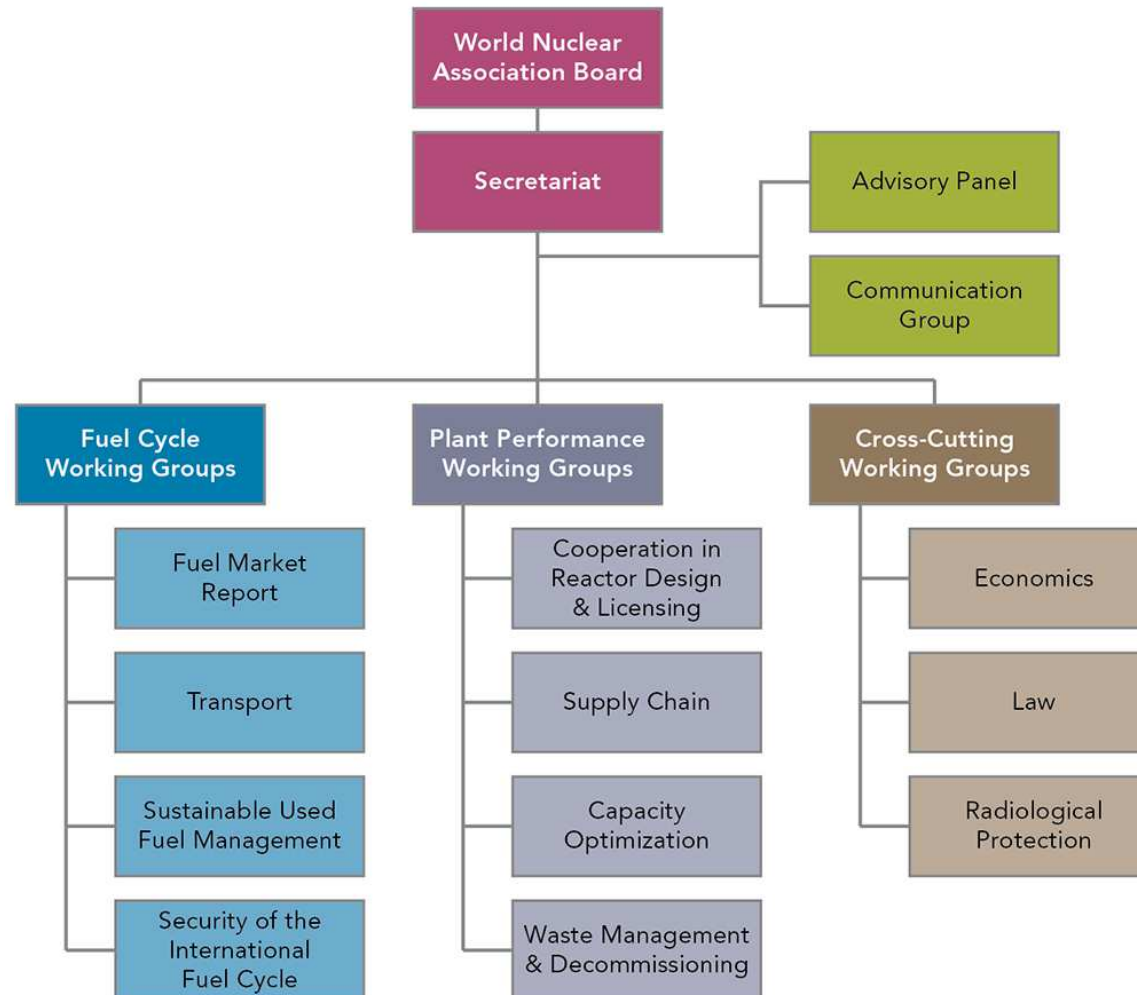
Global Nuclear Status



Our Member Companies

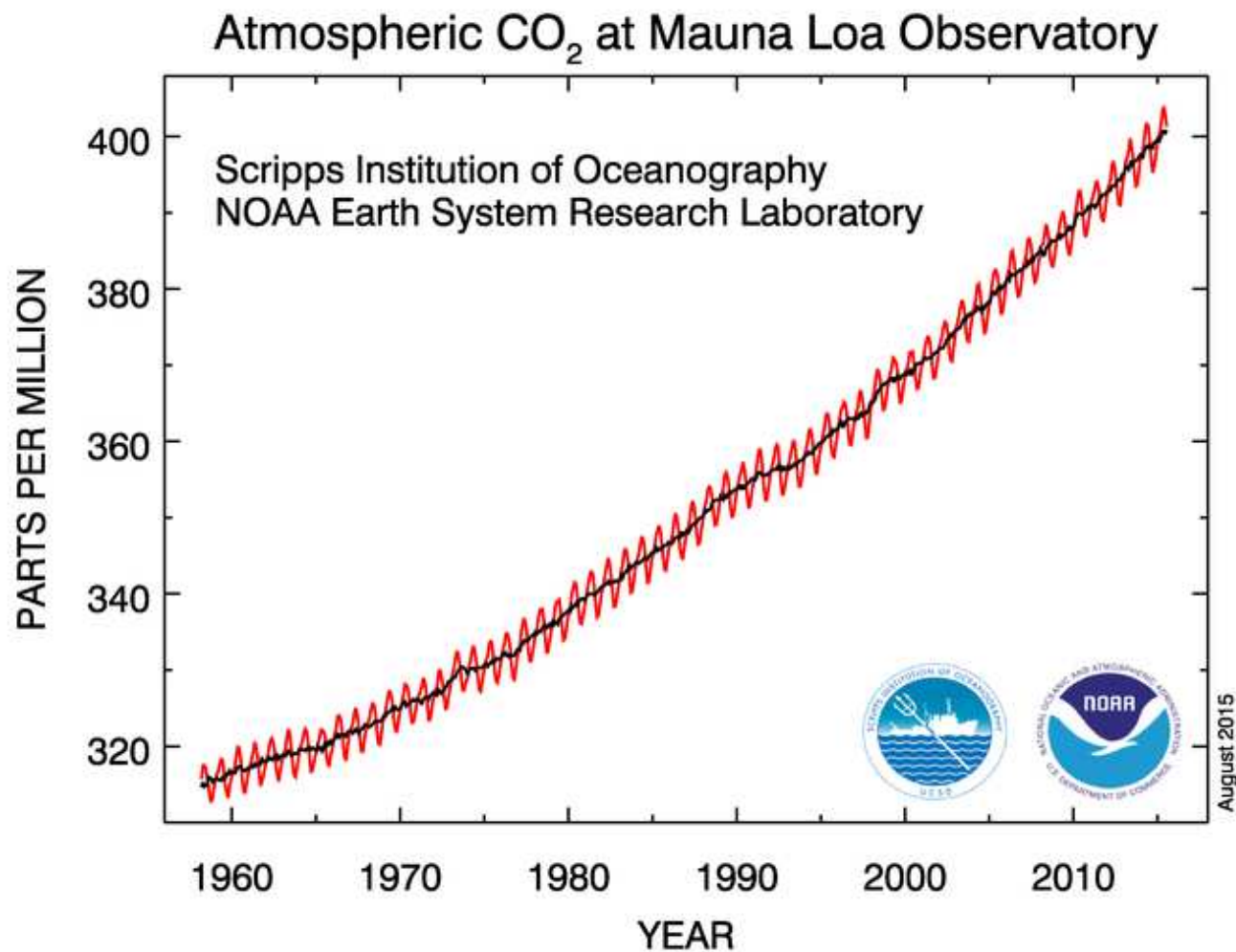


Members' groups

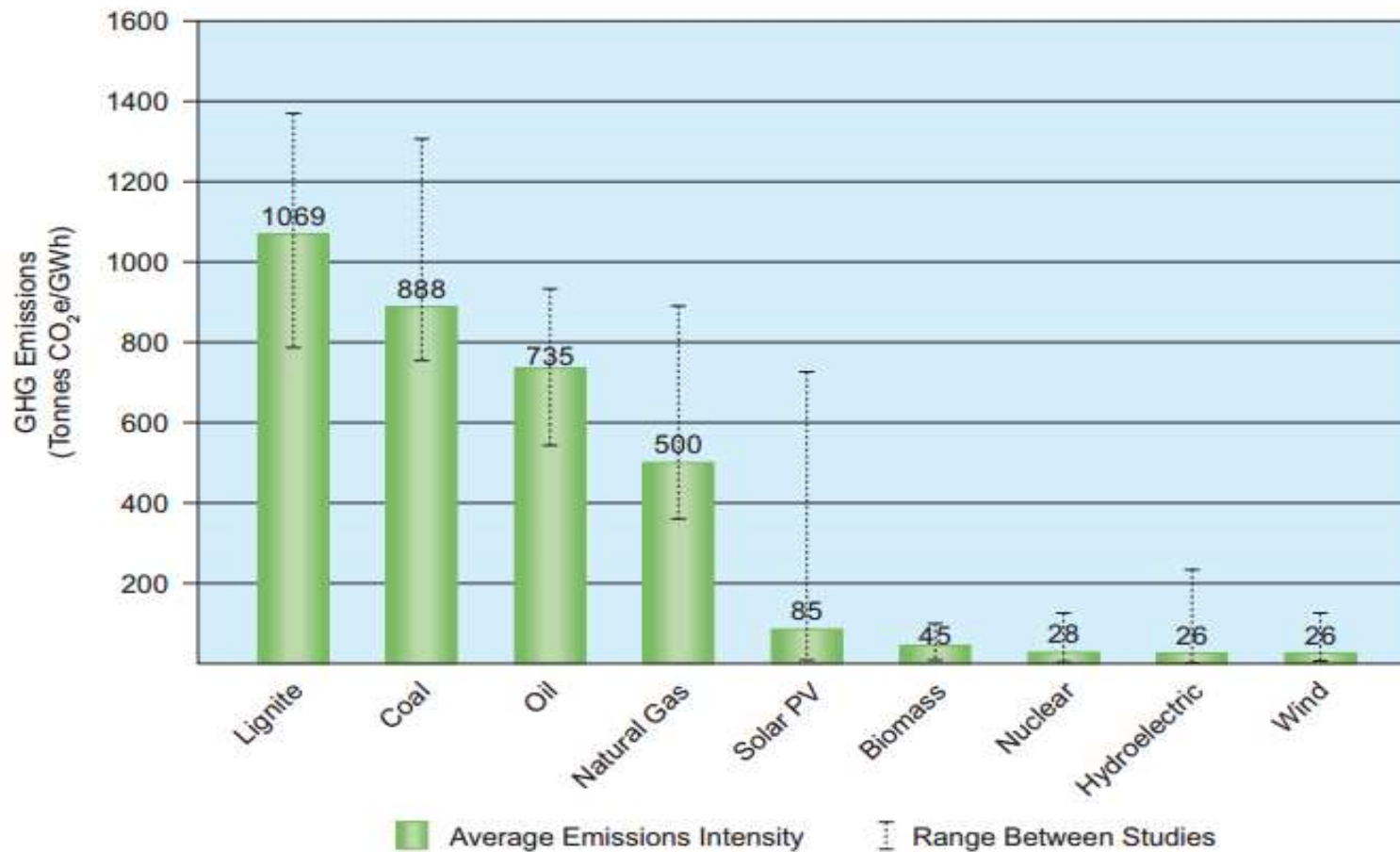


Climate emissions

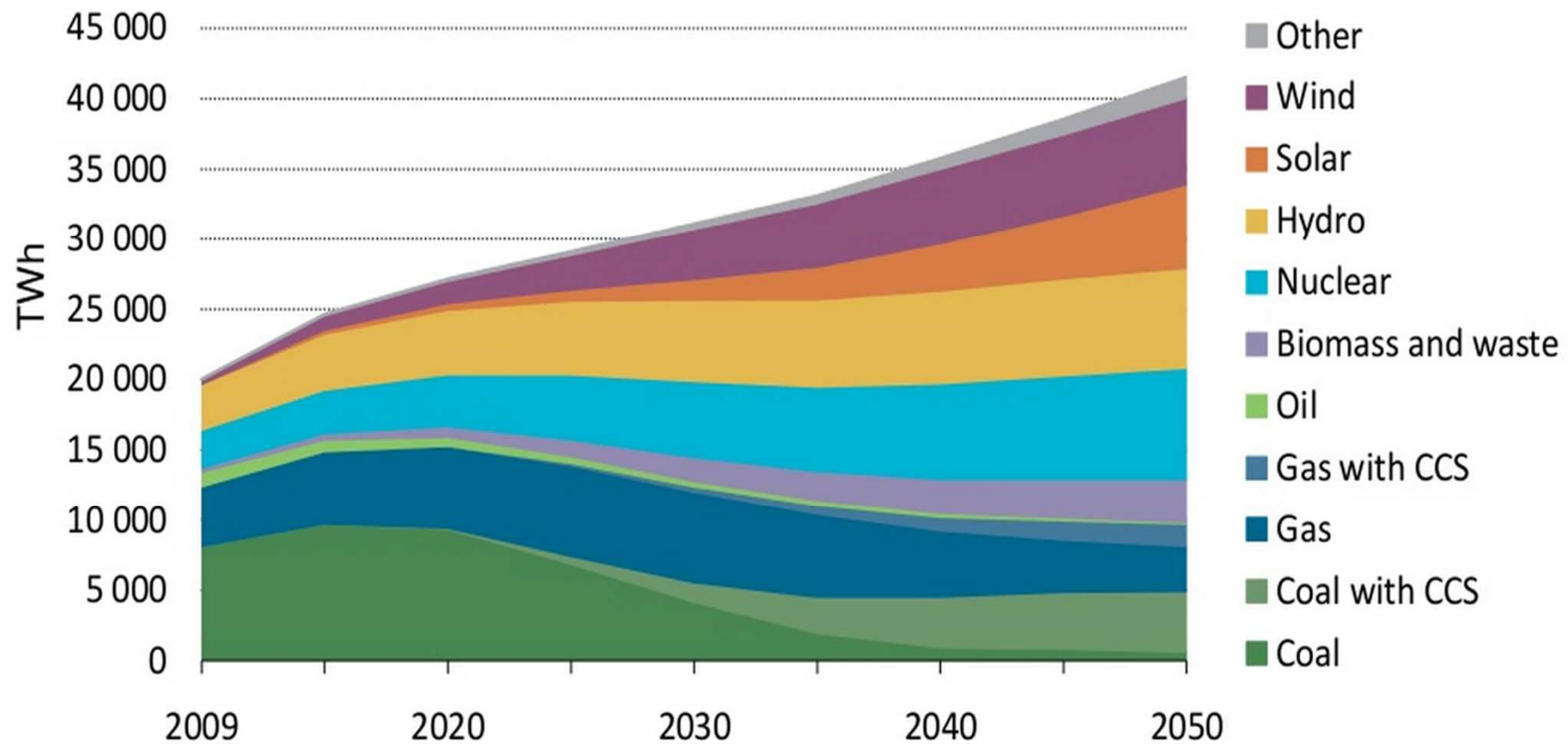
Closing in fast on 450 ppm (2°C)



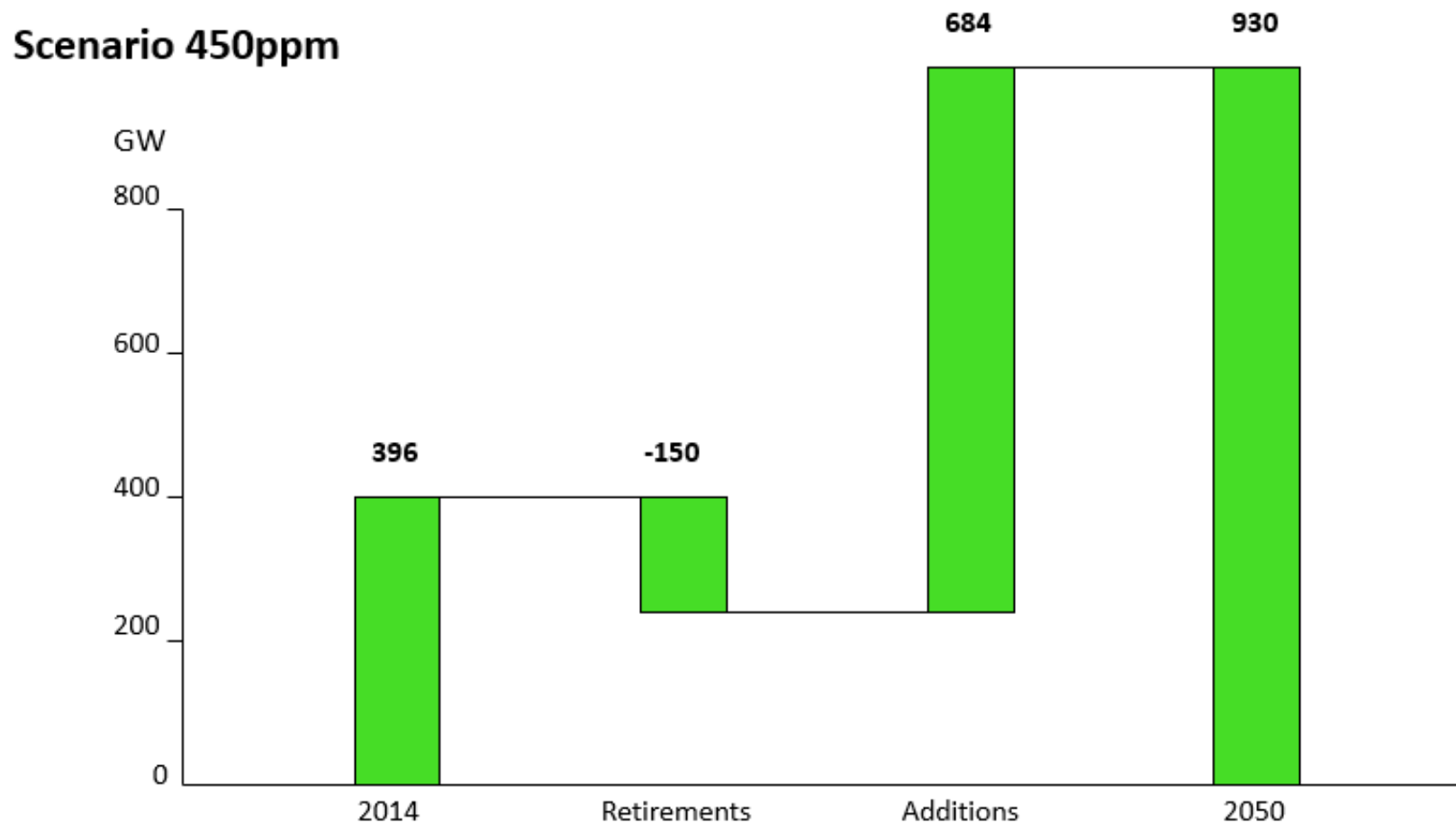
Elimination of carbon from generation vital by year 2100



IEA 2°C Scenario: Nuclear is Required to Provide the Largest Contribution to Global Electricity in 2050

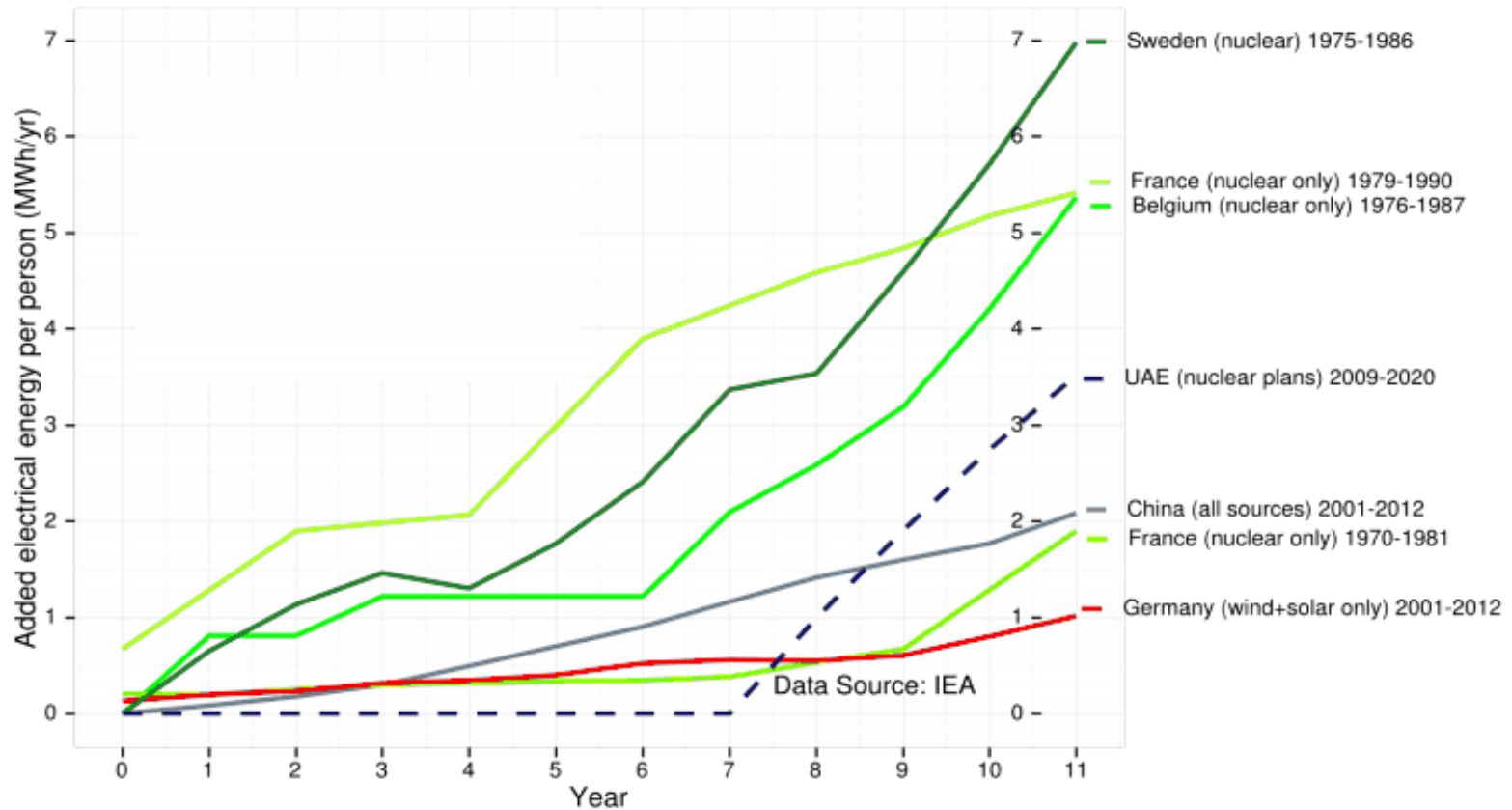


The role of nuclear: Substantial growth required to meet demand in IEA 2°C scenario



Nuclear makes quick, lasting decarbonisation possible

How much extra electrical energy can you add in 11 years?



Source: Geoff Russell – [nuclear has scaled far more rapidly than renewables](#)

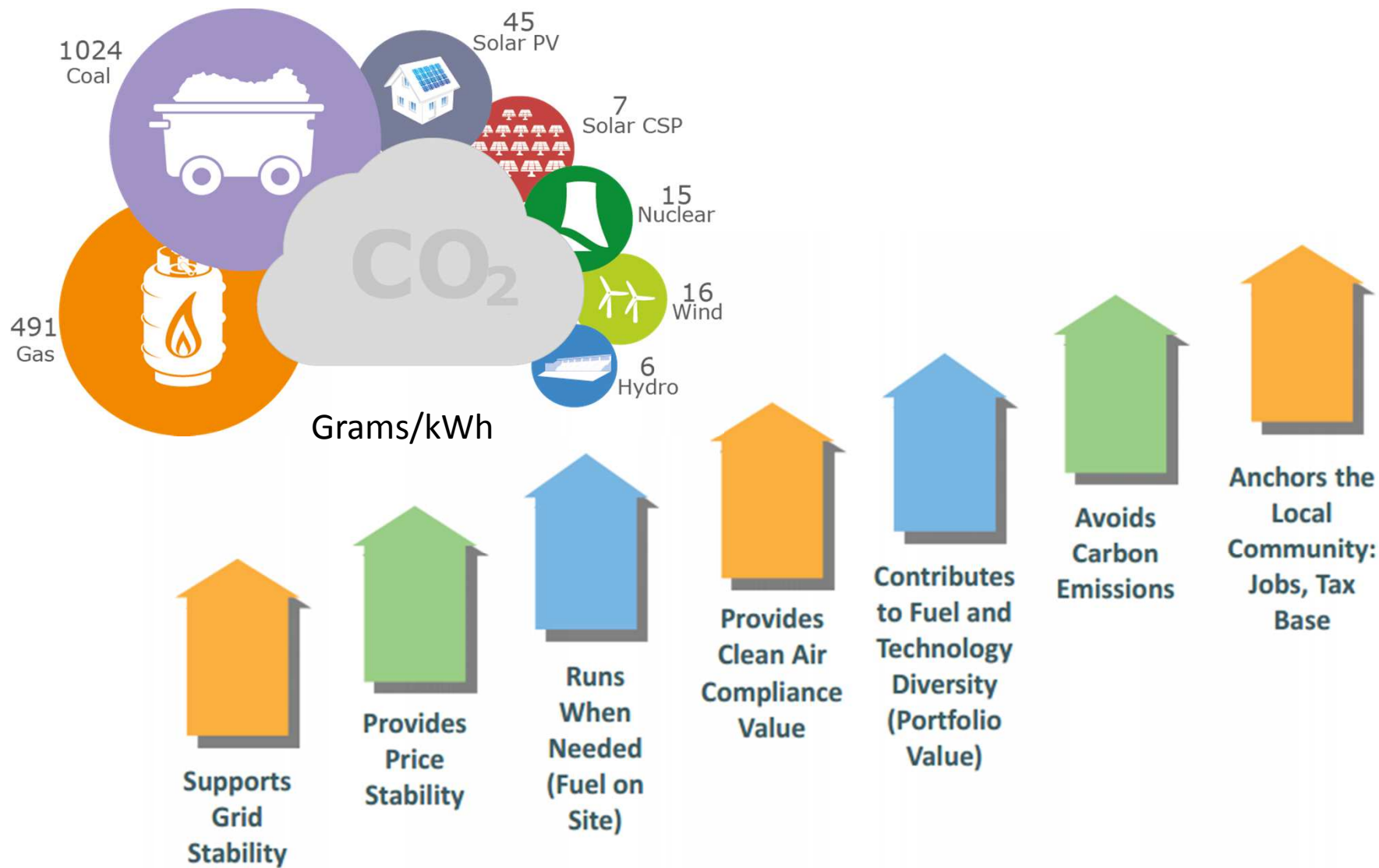
The role of nuclear

Achieving climate harmony

In order to limit climate change, what percentage of electricity do we think nuclear should aim to provide by 2050 – and what can we realistically achieve?

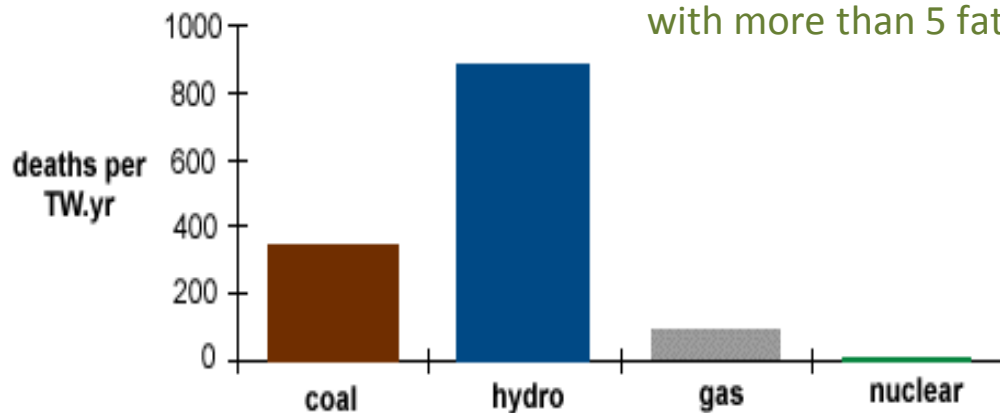
- How does this break down by region?
- How does this impact other energy sources?
- What are the barriers and how do we overcome them?
 - What is required of industry, regulators and governments?
- What technology breakthroughs are required?
- How do we get nuclear costs down?

Nuclear energy brings value



Time for a new safety paradigm

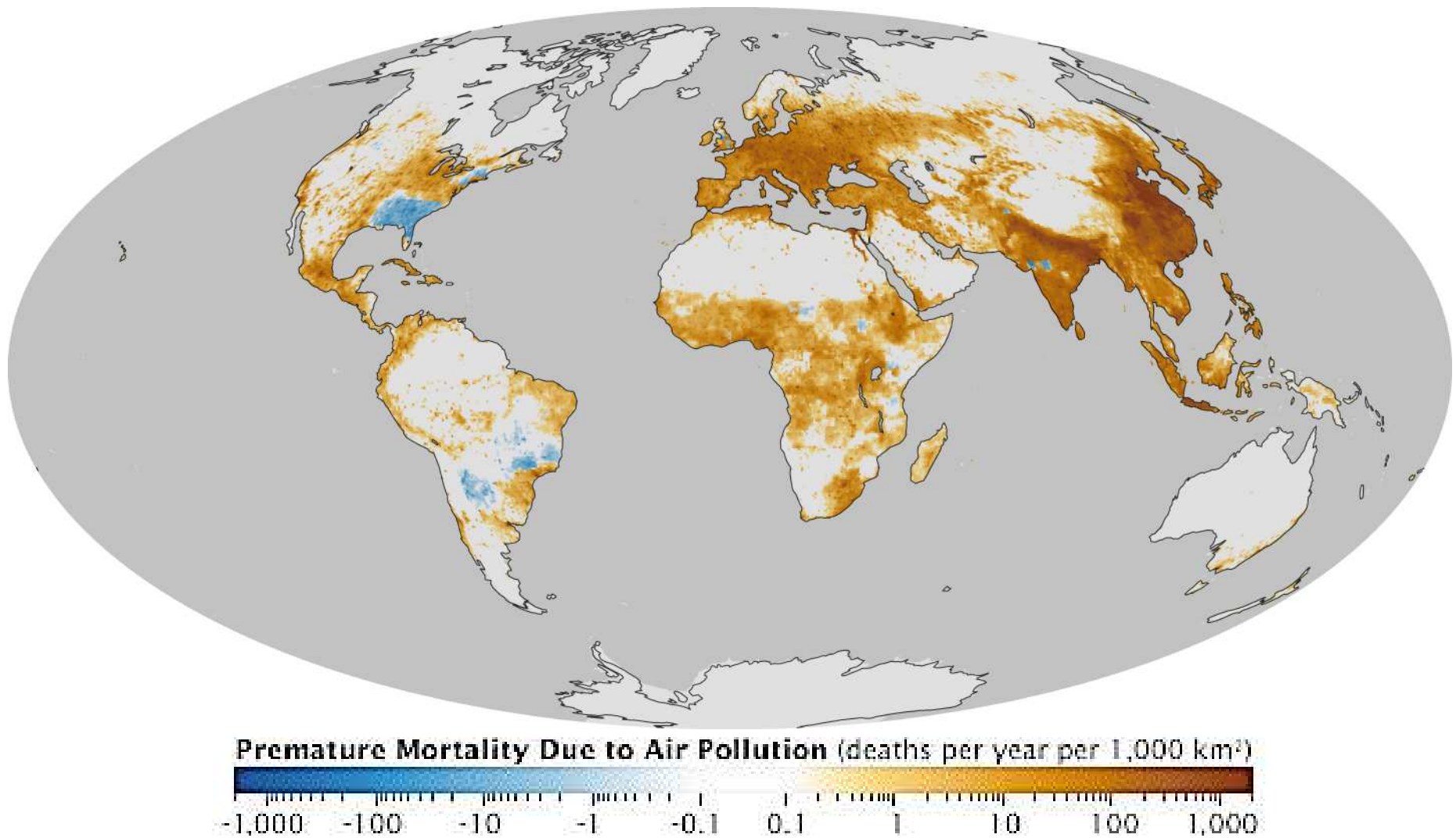
Paul Scherrer Institut 1998:
considering 1943 accidents
with more than 5 fatalities



The alternatives
to nuclear are far
more dangerous
– even including
accidents



Air pollution deaths



Nuclear energy must more than double worldwide

"The contributions of nuclear energy - providing valuable base-load electricity, supplying important ancillary services to the grid and contributing to the security of energy supply - must be fully acknowledged"

“Global capacity (of nuclear) must **more than double**, with **nuclear supplying 17% of global electricity generation in 2050**, to meet the IEA 2 Degree Scenario for the most effective and efficient means of limiting global temperature rise to the internationally agreed maximum.”

International Energy Agency

Nuclear is an important part of the low carbon solution

