

# Mitigating Climate-related Financial Risks in the Energy Sector

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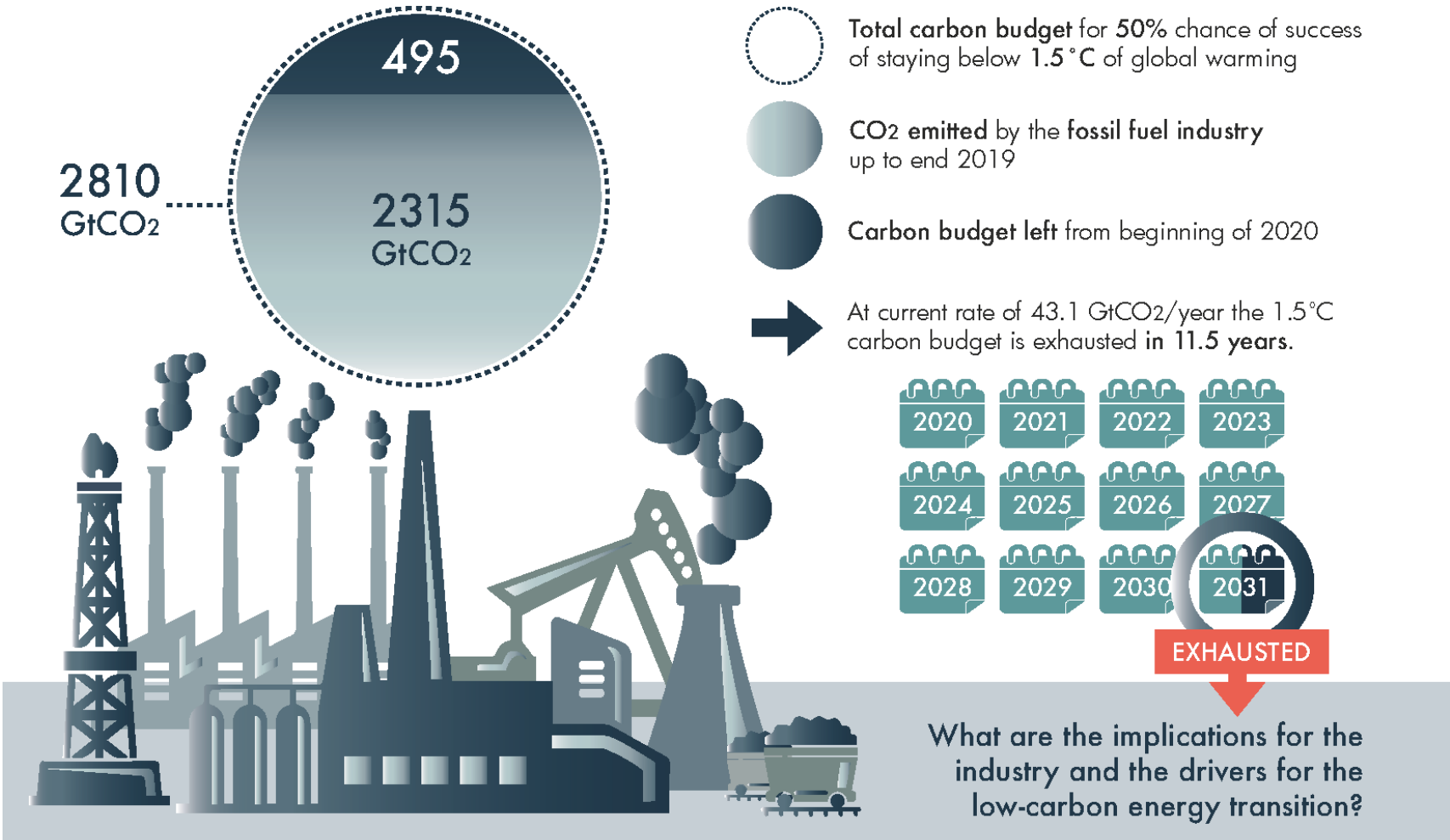
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# Climate-related financial risks

- Physical risks
- Transition risks
  - Policy and legal
  - Technology
  - Market
  - Reputation

# The global carbon budget



Source: Carbon Tracker, January 2020

# Stranded asset risks in the energy sector

**For the oil and gas sector:**

Oil and gas majors are exposed to stranded asset risk in a low-carbon world...  
\*in a 1.6°C demand pathway

**\$2.2tn at risk by 2030**

Shareholder returns are at risk

...and since 2018 they have invested \$50 bn in major projects that undermine climate targets and threaten shareholder returns.

Majors' production cuts needed

To stay within budget, majors need to reduce upstream production from current levels

**by 35% by 2040.**






**For the power sector:**

To meet the global warming target set out in the Paris Agreement, 1 coal unit will need to close every day until 2040.


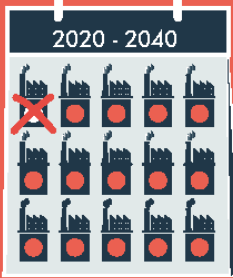

**2020 - 2040**

Is global coal capacity profitable?

2018 **42% unprofitable**

2040 **72% at risk of becoming unprofitable**

Due to combination of renewable energy costs, carbon pricing and air pollution regulations.

**Energy transition drivers:**

Renewable electricity costs less than fossil fuel electricity in 2/3 of the world\*\*.

\*\*According to BloombergNEF

Renewables costs are falling

Solar, wind and batteries costs fall by 15-20% for every doubling in capacity\*\*.




When will fossil fuel demand peak?

In many cases it has already peaked:

- European fossil fuel demand **2006**
- Global coal demand **2013**
- Global ICE cars demand **2017**

**-15-20% cost**

**x2 capacity**

Source: Carbon Tracker, January 2020

# The implications are clear

- To meet the Paris Climate Goals and avoid catastrophic climate change, our economies need to be rapidly de-carbonised
  - More than 80% of all proven fossil fuel reserves will become stranded resources
  - Investments in such resources may become stranded assets
- Renewable energy has become a competitive alternative to fossil fuels
- The energy sector needs to become part of the solution by:
  - Phasing out fossil fuel
  - Investing large-scale in renewable energy