

AM ENERGY FORWARD ANNUAL MEETING 2019



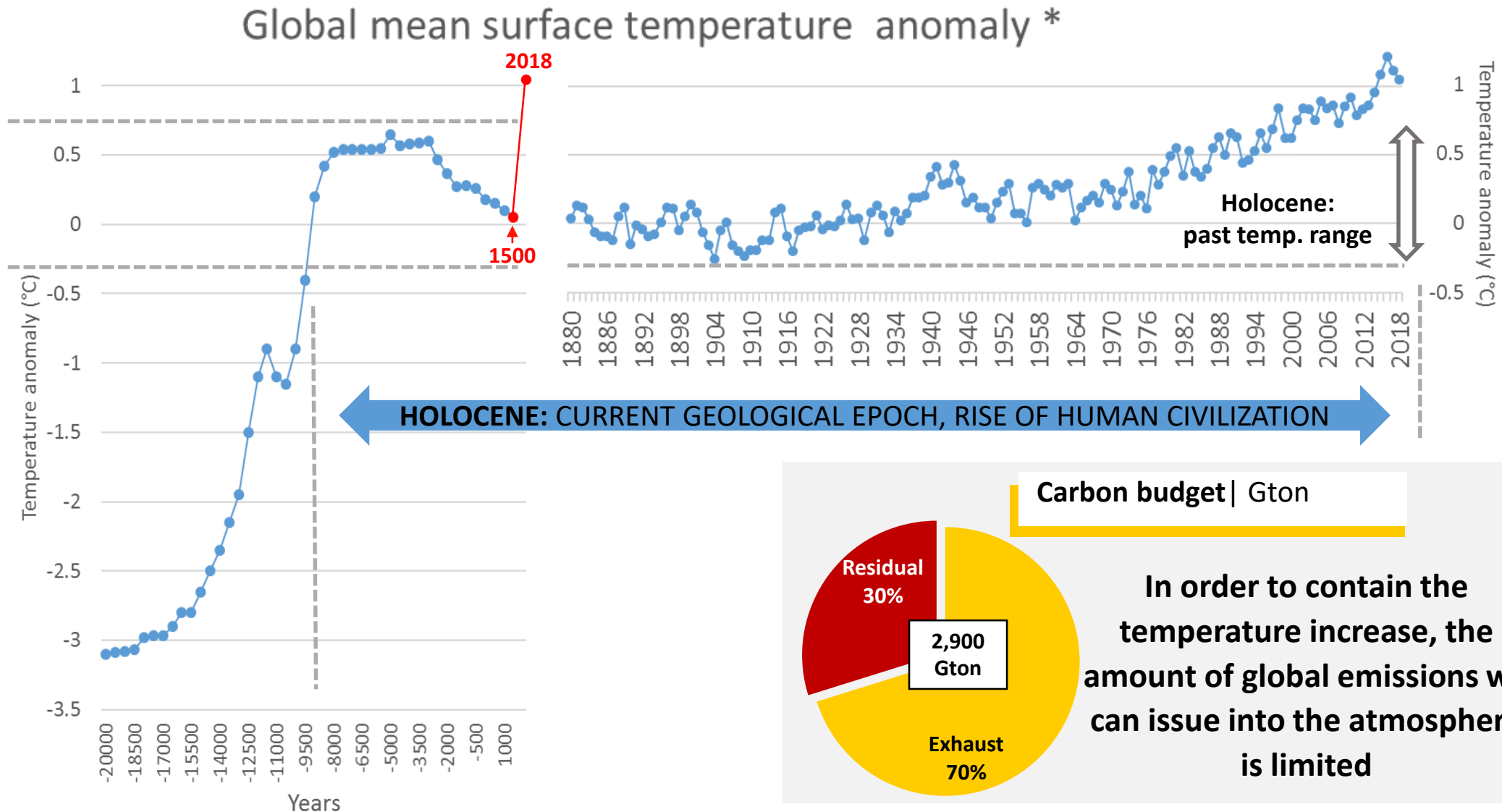
Energy Efficiency: a key for moving toward a low carbon energy

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Is Earth truly warming up in an anomalous way ?

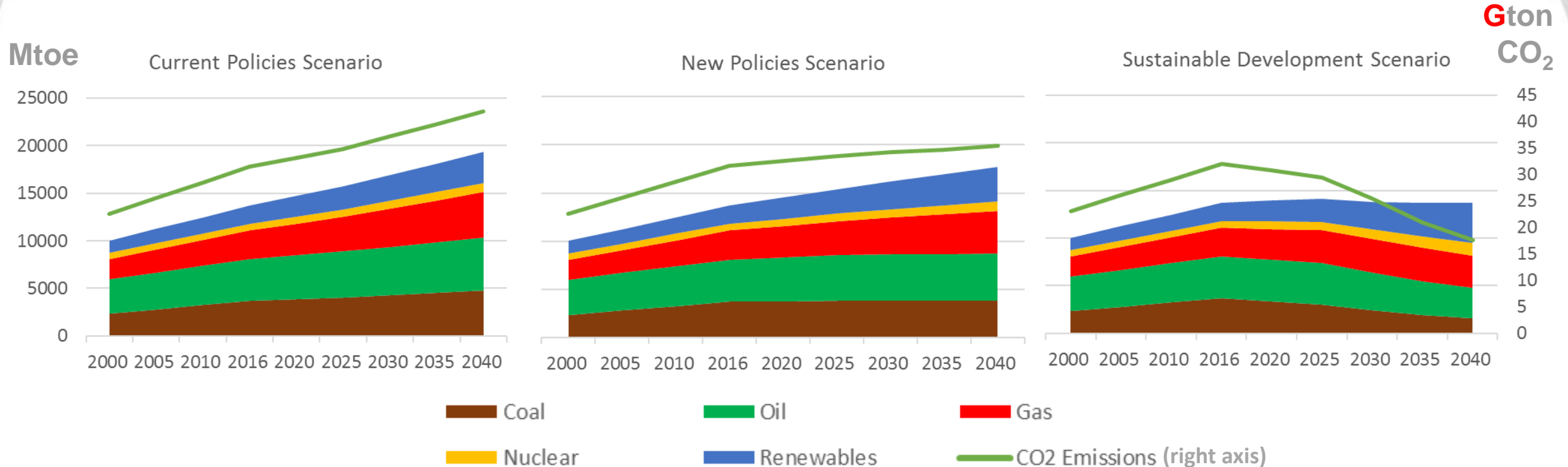


* Anomaly is difference between the current temperature of the year and the average in data recorded from 1880 to 1889 (pre-industrial age), Sources: NASA-GISS (1880-2018) and data from a chart by David Spratt and Jos Hageelars



Energy consumption scenarios according to IEA*

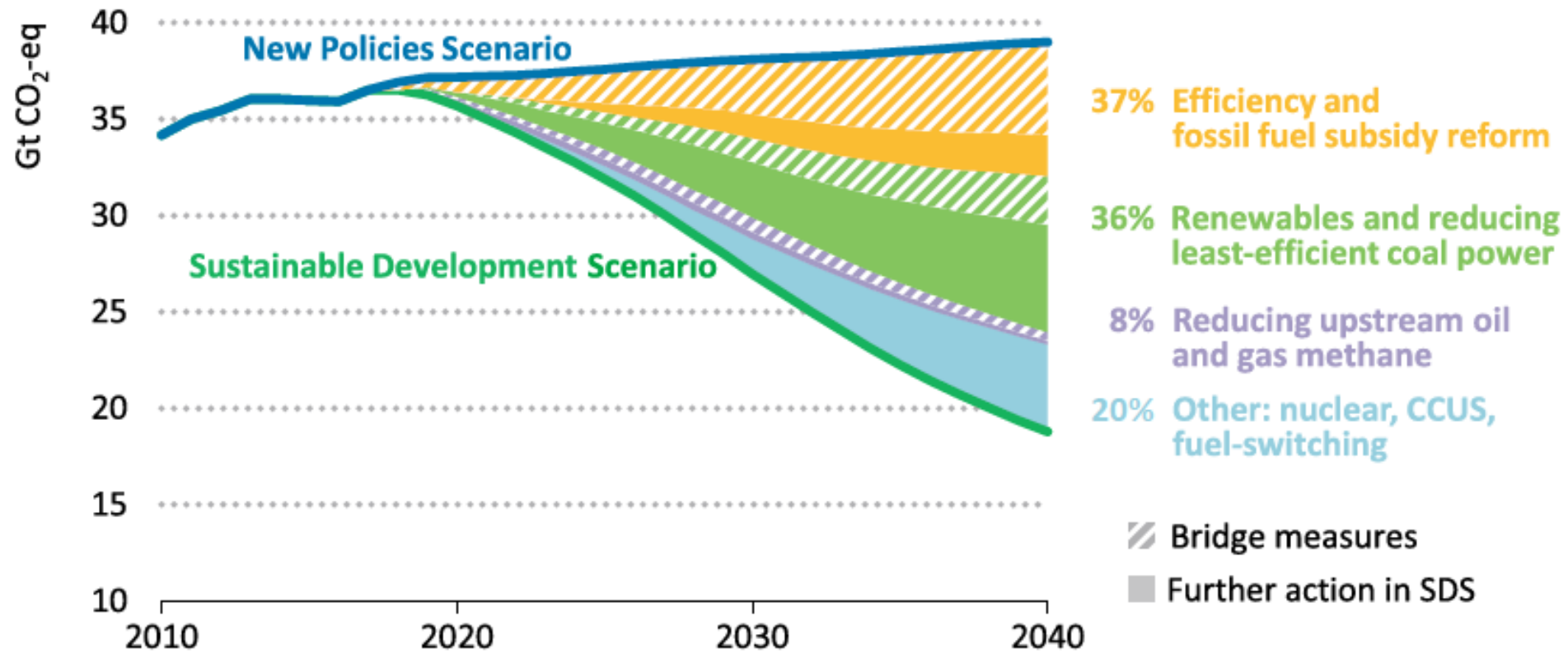
*IEA, International Energy Agency



In the IEA Scenarios:

- Oil consumption is still in the range between 23-29% in 2040
- Natural gas consumption increases from 22% (2017) to 25% (2040) of the energy mix in all scenarios

Major components of emission reduction

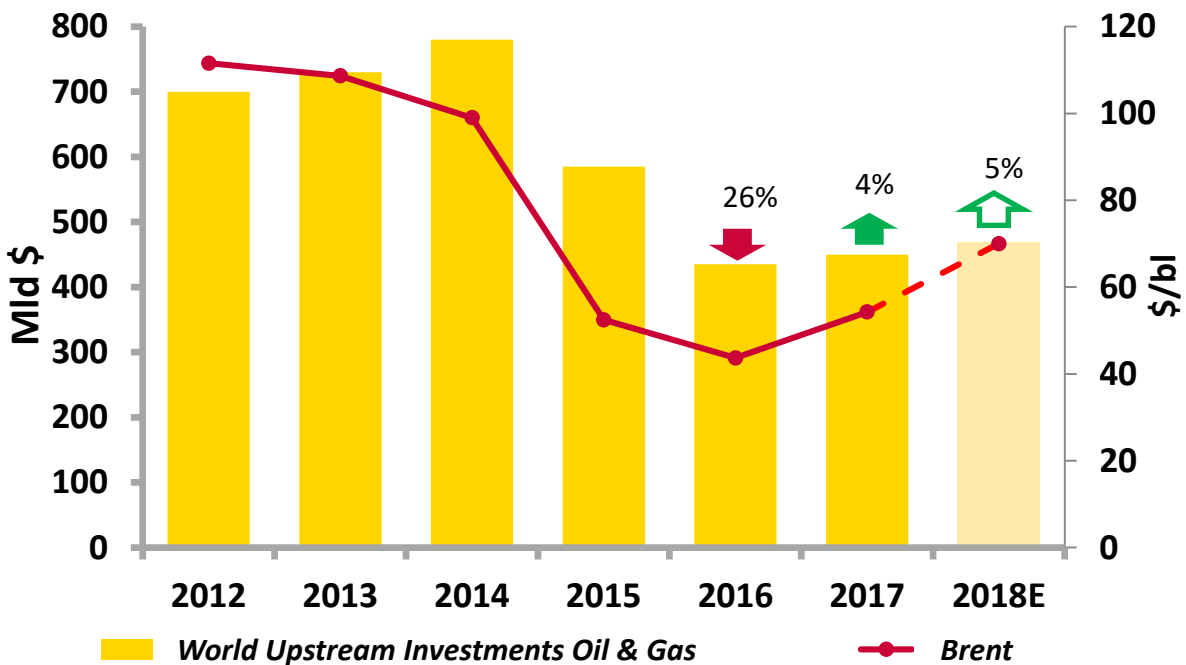


Source: IEA , World Energy Outlook 2018



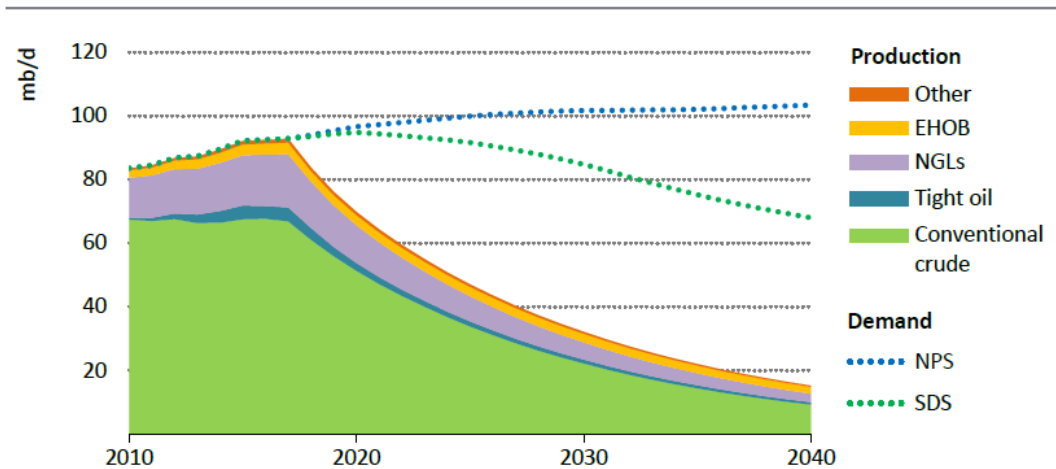
But O&G investments are still required

World upstream investments O&G | Mld US\$



Oil Supply and Demand Gap

Figure 3.13 ▶ Oil production with no new investment from 2018 and demand in the New Policies and Sustainable Development scenarios

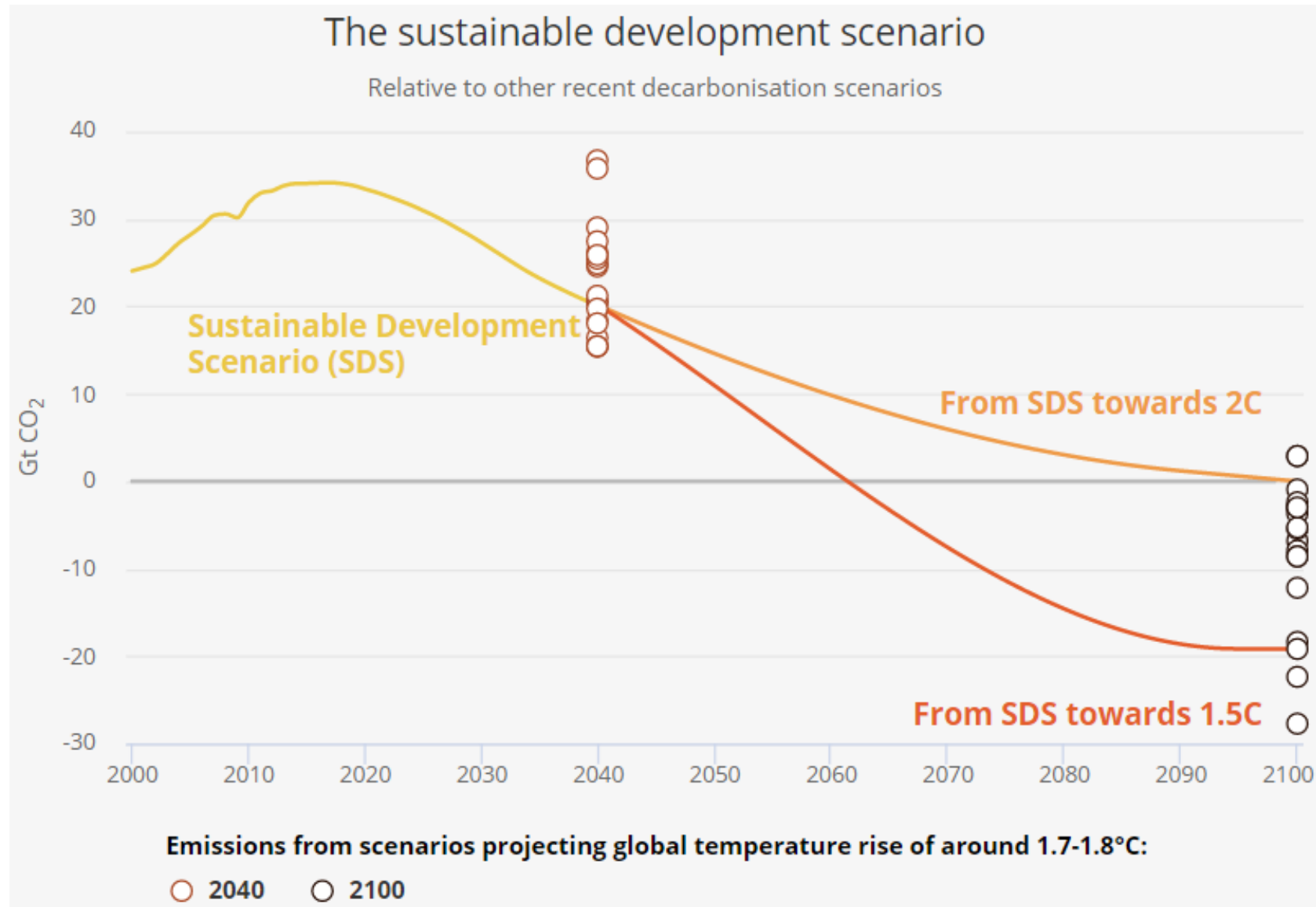


With no new investment, global oil production would halve by 2025:
an average loss of nearly 6 mb/d every year

Note: EHOB = extra-heavy oil and bitumen; NGLs = natural gas liquids; NPS = New Policies Scenario; SDS = Sustainable Development Scenario.



Negative CO2 Emissions



Source: IEA, World Energy Outlook 2017

