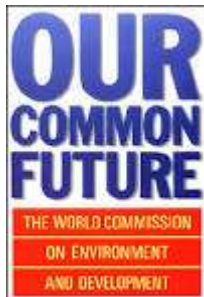


Sustainability

What does it mean?

What does it look like?



“Meeting the needs of the present without compromising the ability of future generations to meet their own needs.”

- UN Brundtland Commission, 1987



**SUSTAINABLE
DEVELOPMENT GOALS**



2015

The Sustainable Development Goals are a call for action by all countries – poor, rich and middle-income – to promote prosperity while protecting the planet. They recognize that ending poverty must go hand-in-hand with strategies that build economic growth and address social needs including education, health, social protection, and job opportunities, while tackling climate change and environmental protection.



SUSTAINABLE DEVELOPMENT GOALS

LESS STUFF
MORE JOY

2015

1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



4 QUALITY EDUCATION



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



14 LIFE BELOW WATER



15 LIFE ON LAND



PEOPLE OF THE WORLD

The United Nations expects the global population to reach 8 billion this week, and 10.4 billion by 2100.

Source: UN Population Division

Population

World 'population bomb' may never go off as feared, finds study

Population likely to peak sooner and lower than expected with beneficial results - but environment is priority

Jonathan Watts

@jonathanwatts

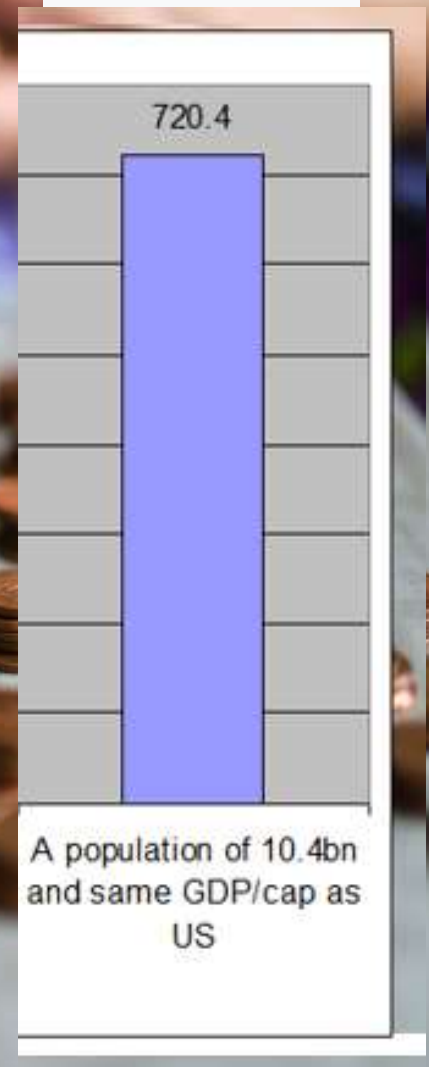
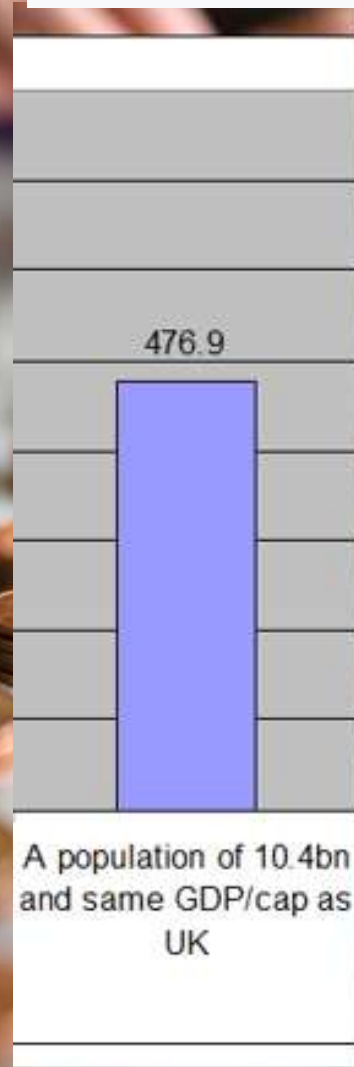
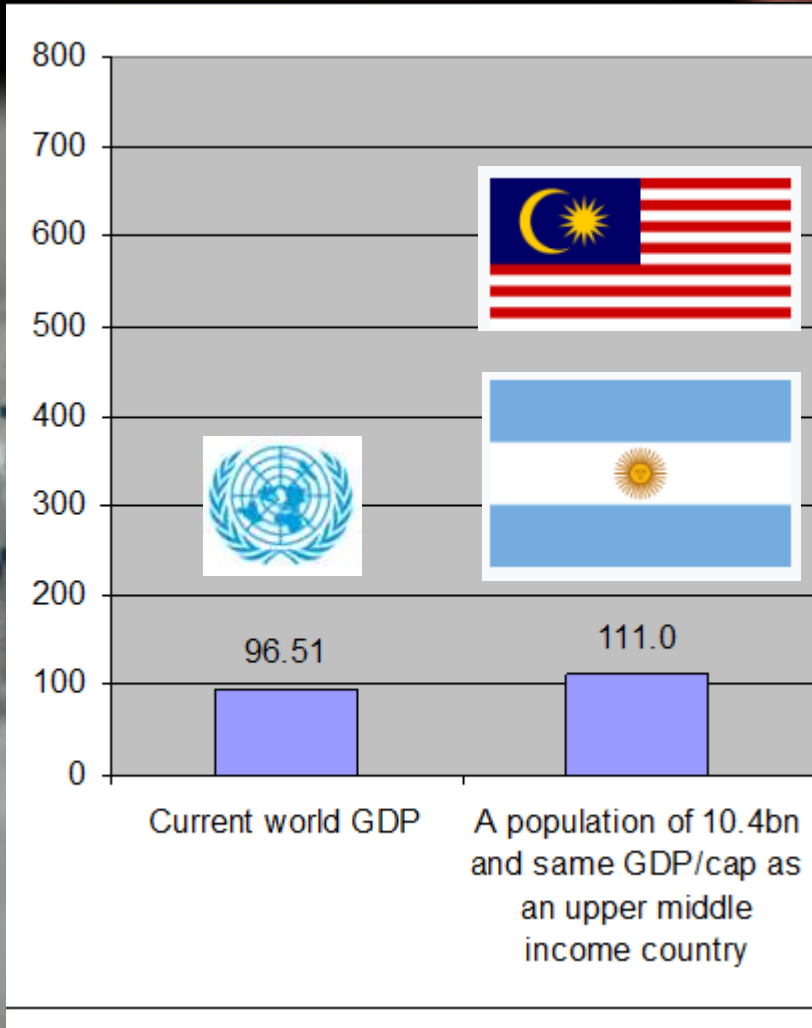
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1 NO POVERTY

World GDP (\$tn)



The "stuff" made by humans already weighs more than the biomass of the planet.

Each of us is indirectly responsible for the production of our own body weight in stuff each week.





THE LANCET

THE LANCET COMMISSIONS | [VOLUME 393, ISSUE 10170, P447-492, FEBRUARY 02, 2019](#)

Food in the Anthropocene: the EAT–*Lancet* Commission on healthy diets from sustainable food systems

[Prof Walter Willett, MD](#) • [Prof Johan Rockström, PhD](#) • [Brent Loken, PhD](#)   • [Marco Springmann, PhD](#) •

[Prof Tim Lang, PhD](#) • [Sonja Vermeulen, PhD](#) • et al. [Show all authors](#)

Published: January 16, 2019 • DOI: [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4) •

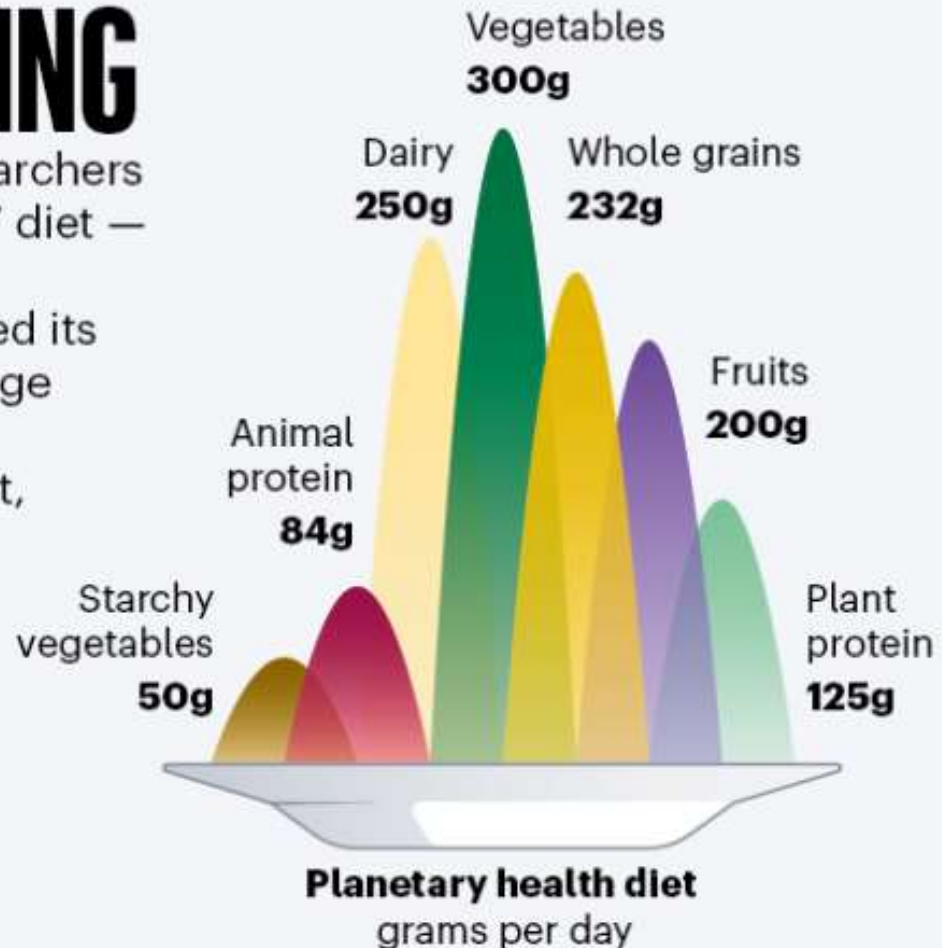
The goal: to Achieve Planetary Health Diets for Nearly 10 Billion People by 2050.

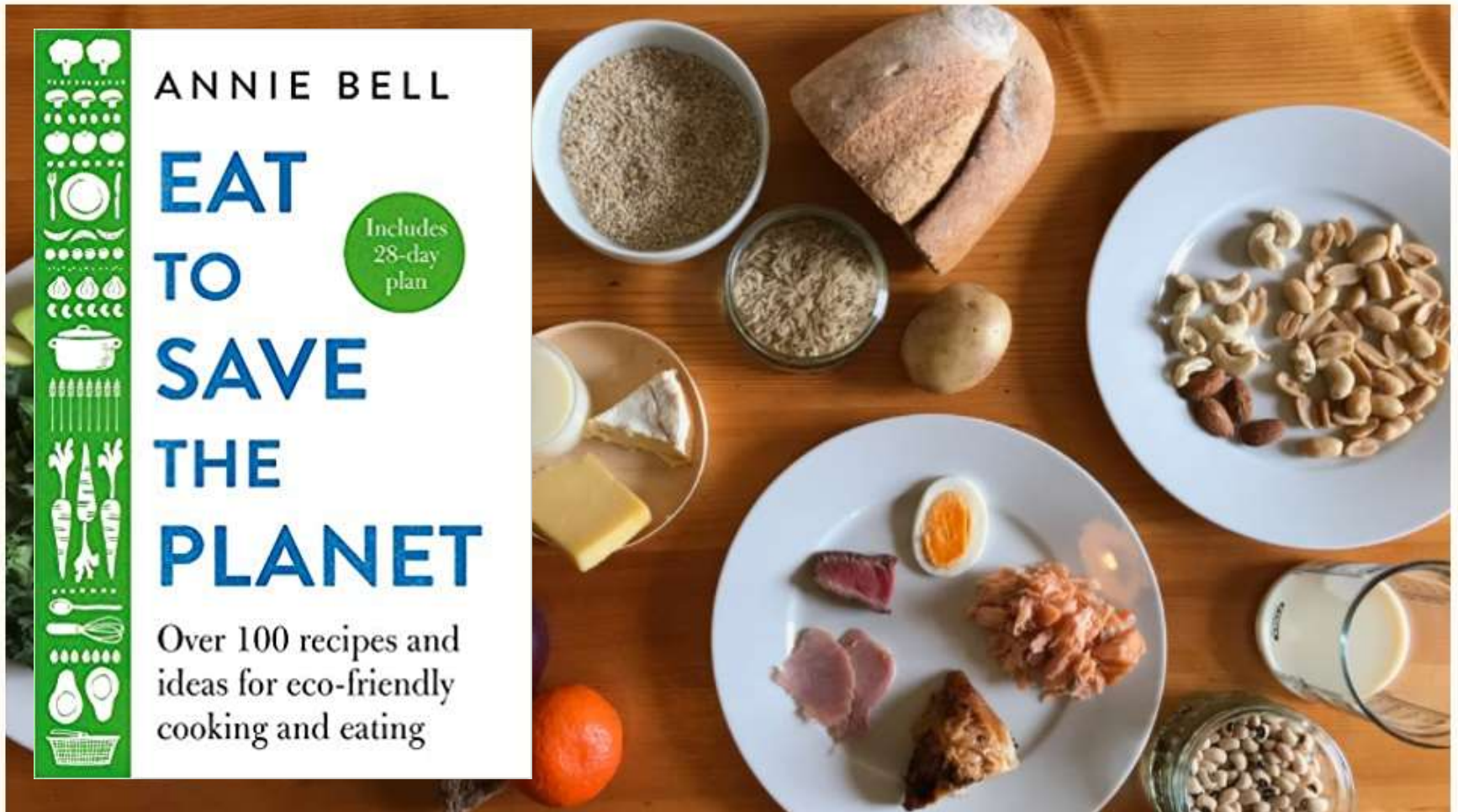


HEALTHY EATING

A commission of food researchers devised a 'planetary health' diet — meant to be nutritious and sustainable — and compared its composition with the average diets in different regions. Further studies showed that, in many regions, following the proposed diet would be prohibitively expensive.

By Kerri Smith
Design by Jasiek Krzysztofiak





A picture of a day's worth of food according to the Planetary Health Diet. Credit: Sonja Vermeulen

FEATURE

A safe operating space for humanity

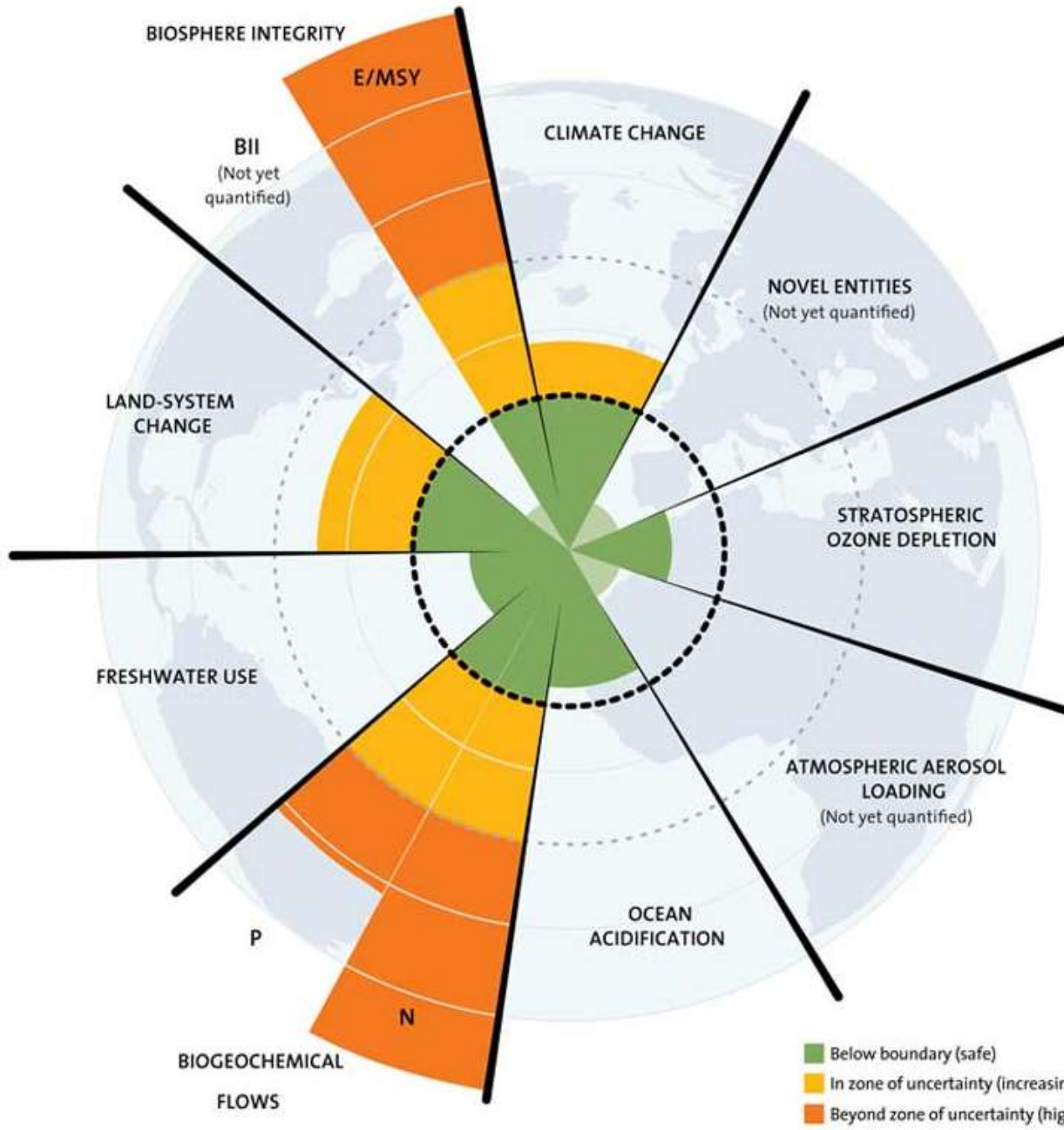
Identifying and quantifying planetary boundaries that must not be transgressed could help prevent human activities from causing unacceptable environmental change, argue **Johan Rockström** and colleagues.

Although Earth has undergone many periods of significant environmental change, the planet's environment has been unusually stable for the past 10,000 years¹⁻³. This period of stability — known to geologists as the Holocene — has seen human civilizations arise, develop and thrive. Such stability may now be under threat. Since the Industrial Revolution, a new era has arisen,



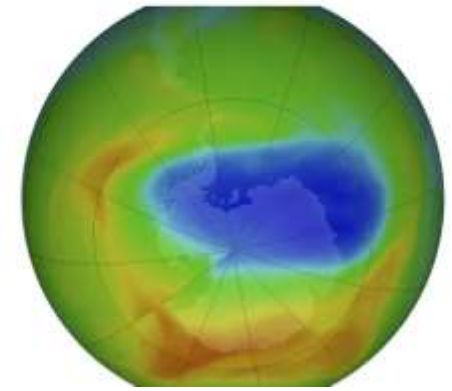
SUMMARY

- New approach proposed for defining preconditions for human development
- Crossing certain biophysical thresholds could have disastrous consequences for humanity
- Three of nine interlinked planetary boundaries have already been overstepped



Earth's ozone layer on course to be healed within decades, UN report finds

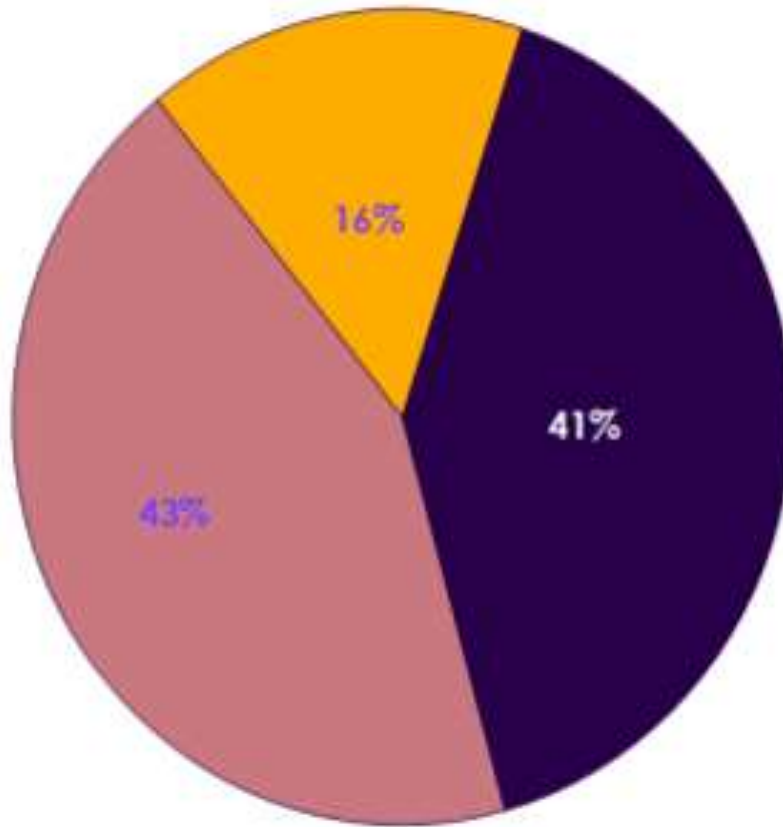
Most of atmospheric layer that protects planet from ultraviolet radiation likely to be fully recovered for most of world by 2040



Jan 2023



Role of societal and behavioural changes in the Balanced Net Zero Pathway (2035)



- Low-carbon technologies or fuels, not societal/behavioural changes
- Measures with a combination of low-carbon technologies and societal/behaviour changes
- Largely societal or behaviour changes

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electric

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much



**Please leave the
planet as you
would expect to
find it !**