



# The big picture of the energy transformation

## Status and prospects

5th International Symposium on Sustainability | How to Engage Society and Deploy Decarbonization

Venice 7<sup>th</sup> February 2019

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# We have a massive energy transition ahead of us!

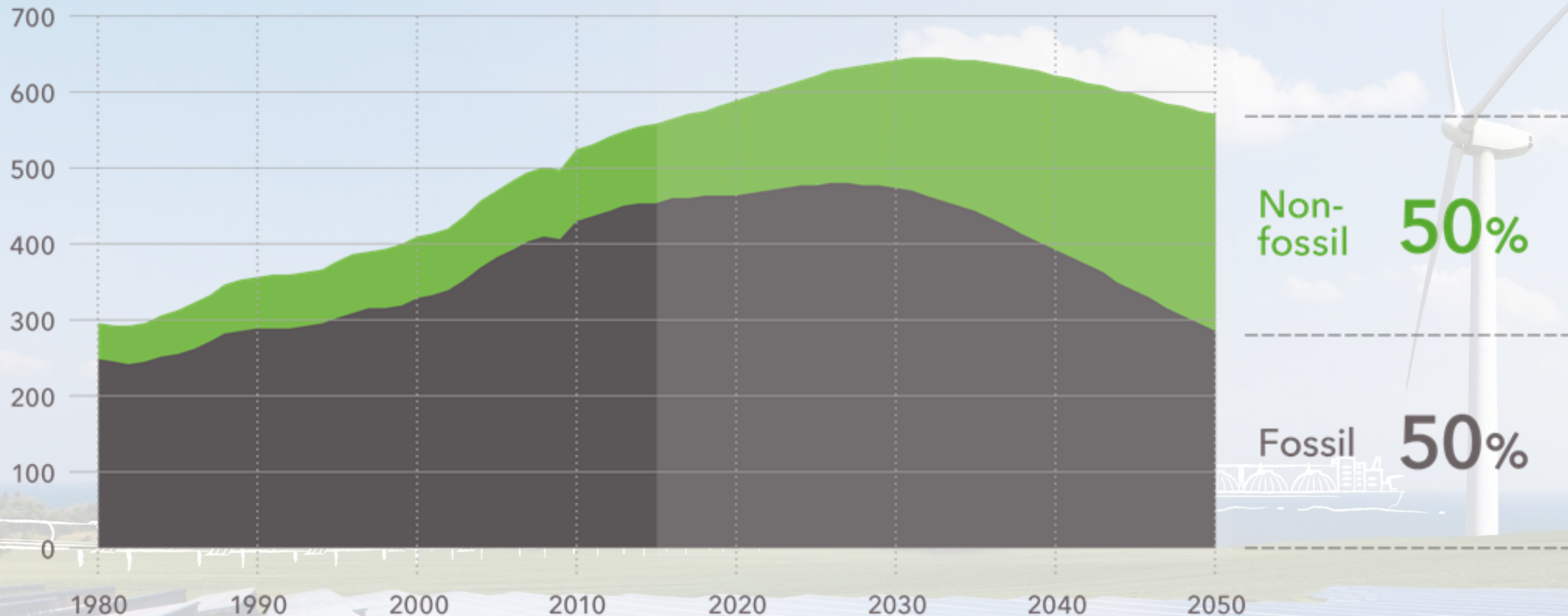
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Over the next decades, the world's energy system will become substantially cleaner, more affordable and more reliable

# AN EQUAL SPLIT BY 2050

Units: EJ/ Yr

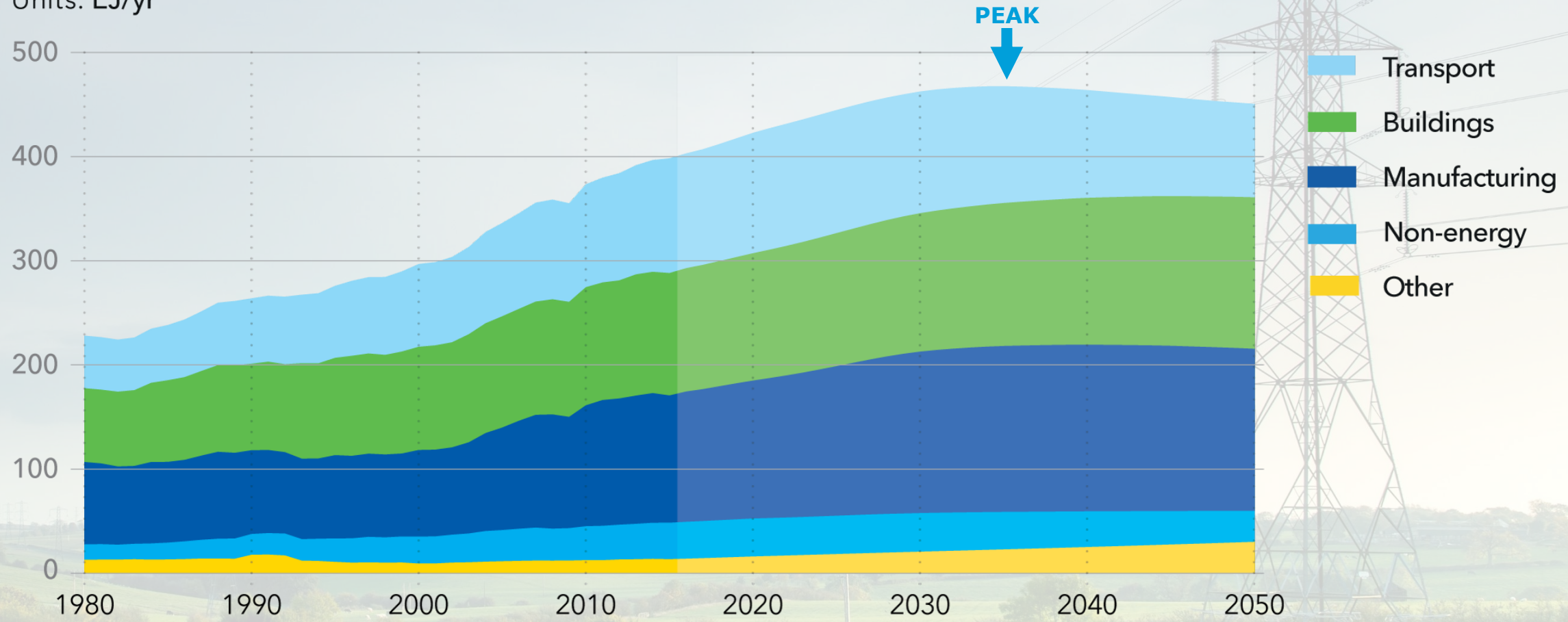


Non-fossil **50%**

Fossil **50%**

# ENERGY DEMAND PEAKING IN 2035

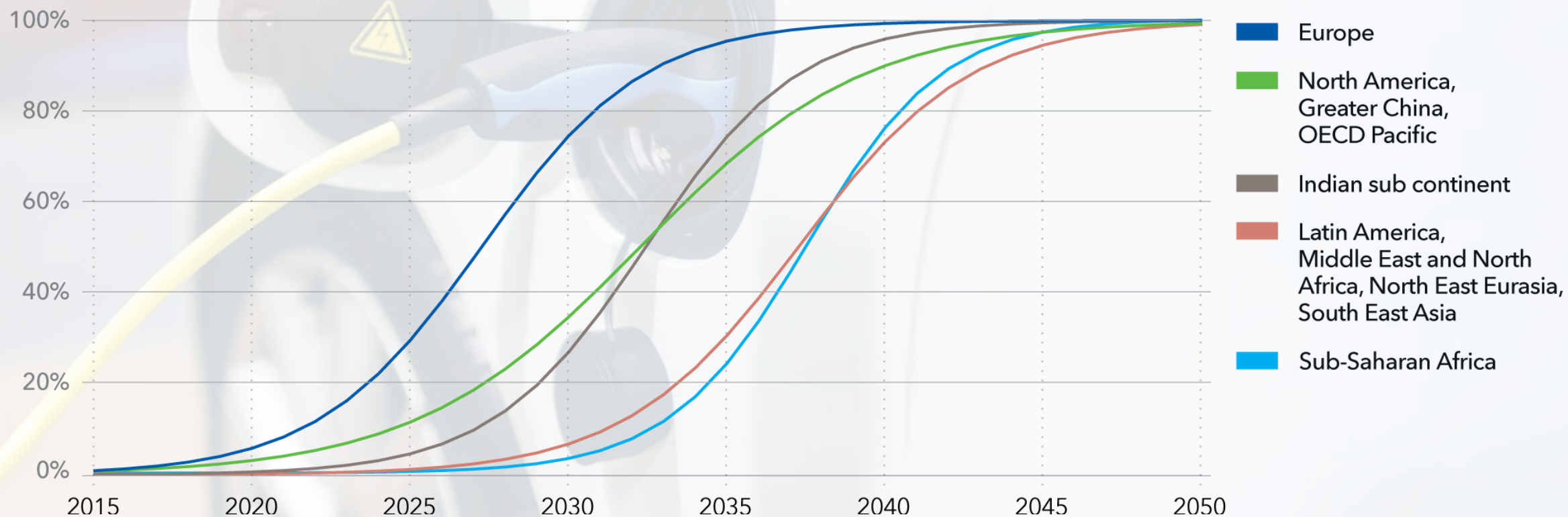
Units: EJ/yr





# NON-COMBUSTION LIGHT VEHICLES

Units: Percentages in new vehicle sales



# NON-COMBUSTION HEAVY VEHICLES

Units: Percentages in new vehicle sales

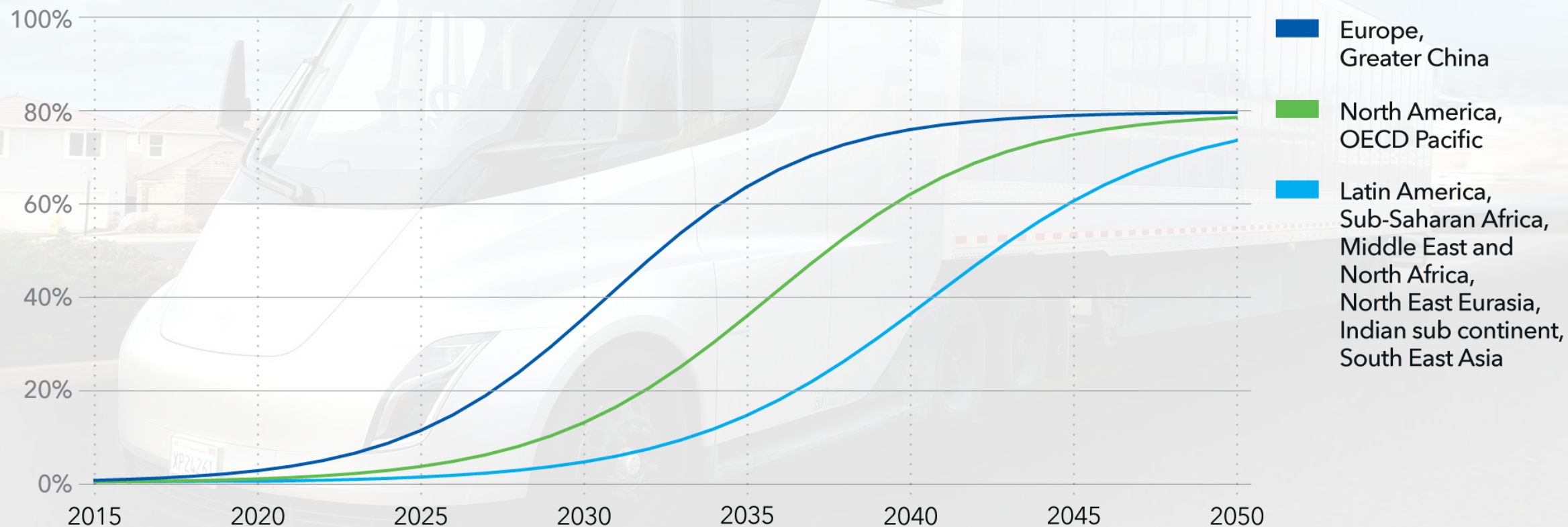


Photo: Tesla Motors

# 3x MORE EFFICIENT

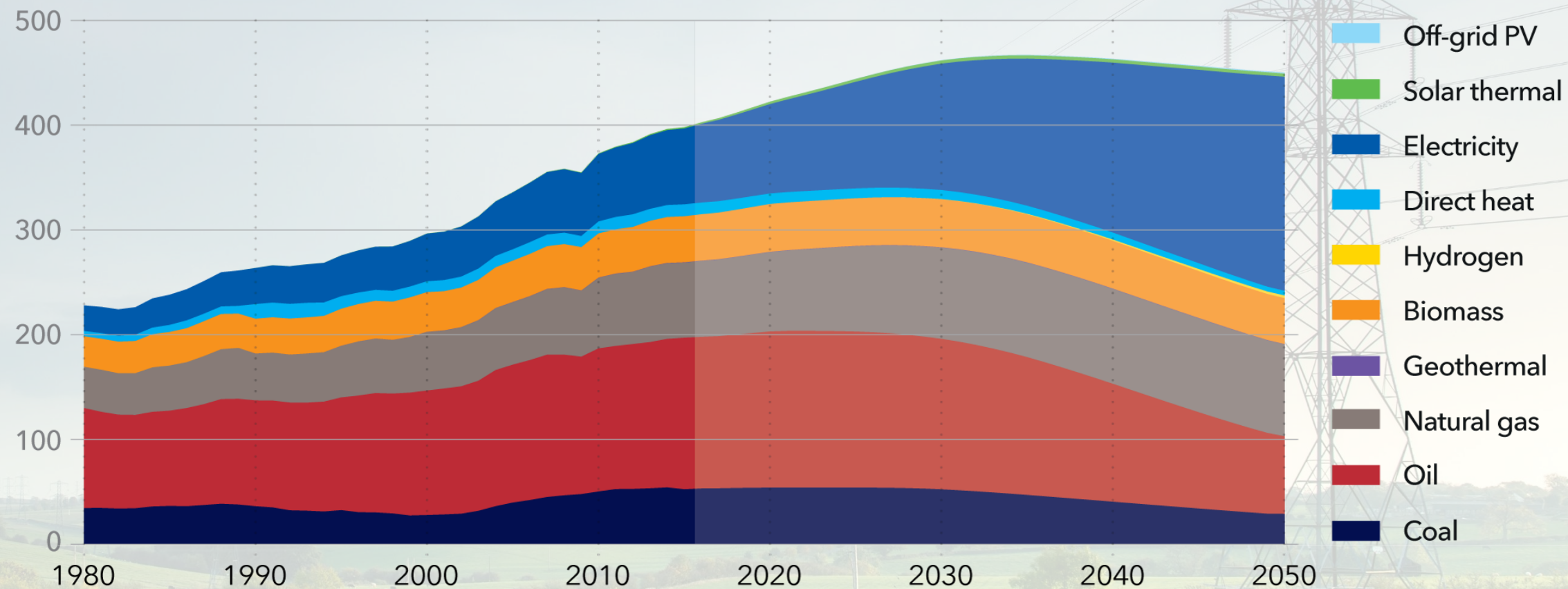


Photo: Wikipedia/Nissangeniss



# ELECTRICITY WILL DOUBLE

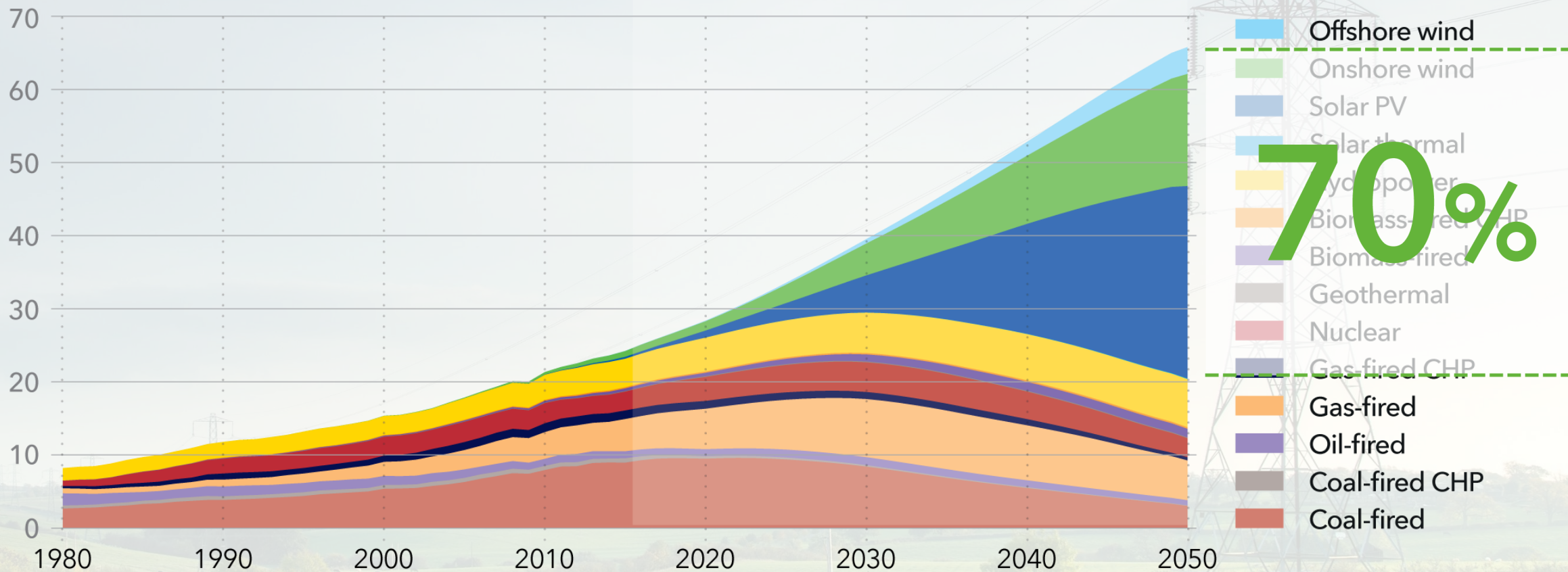
Units: EJ/yr





# SOLAR PV AND WIND SUPPLY TAKING OVER

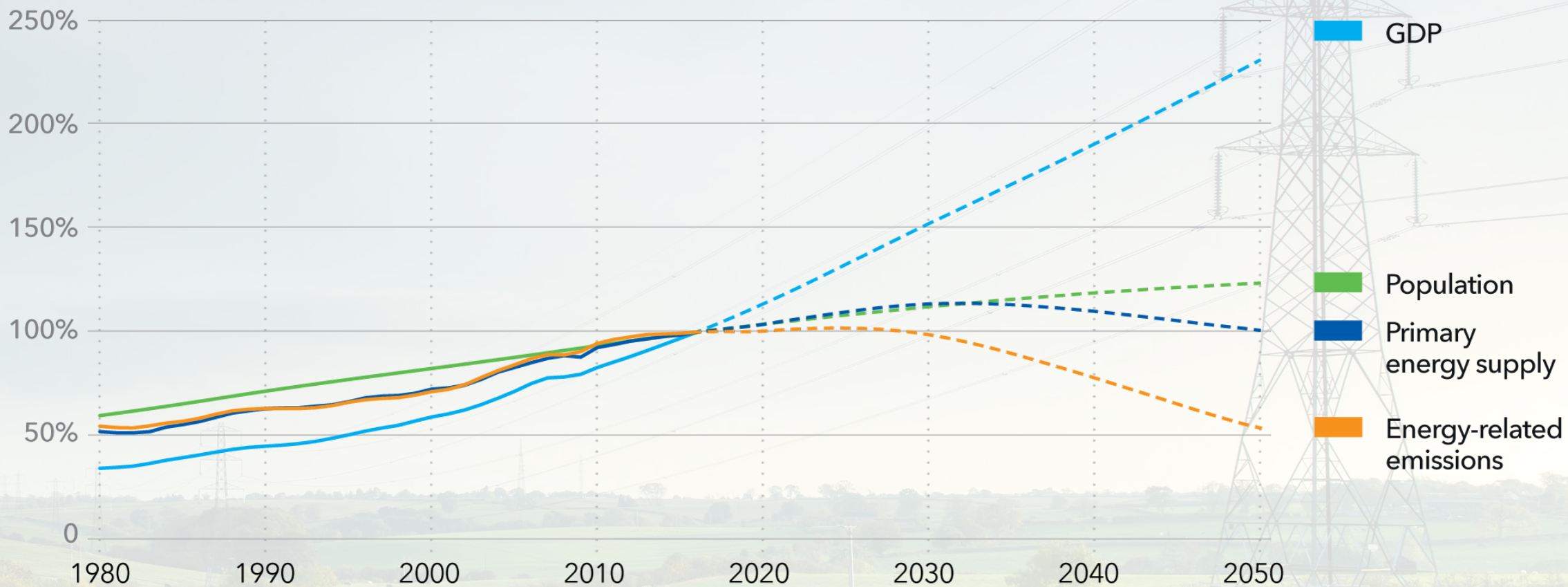
Units: PWh/yr



E > GDP

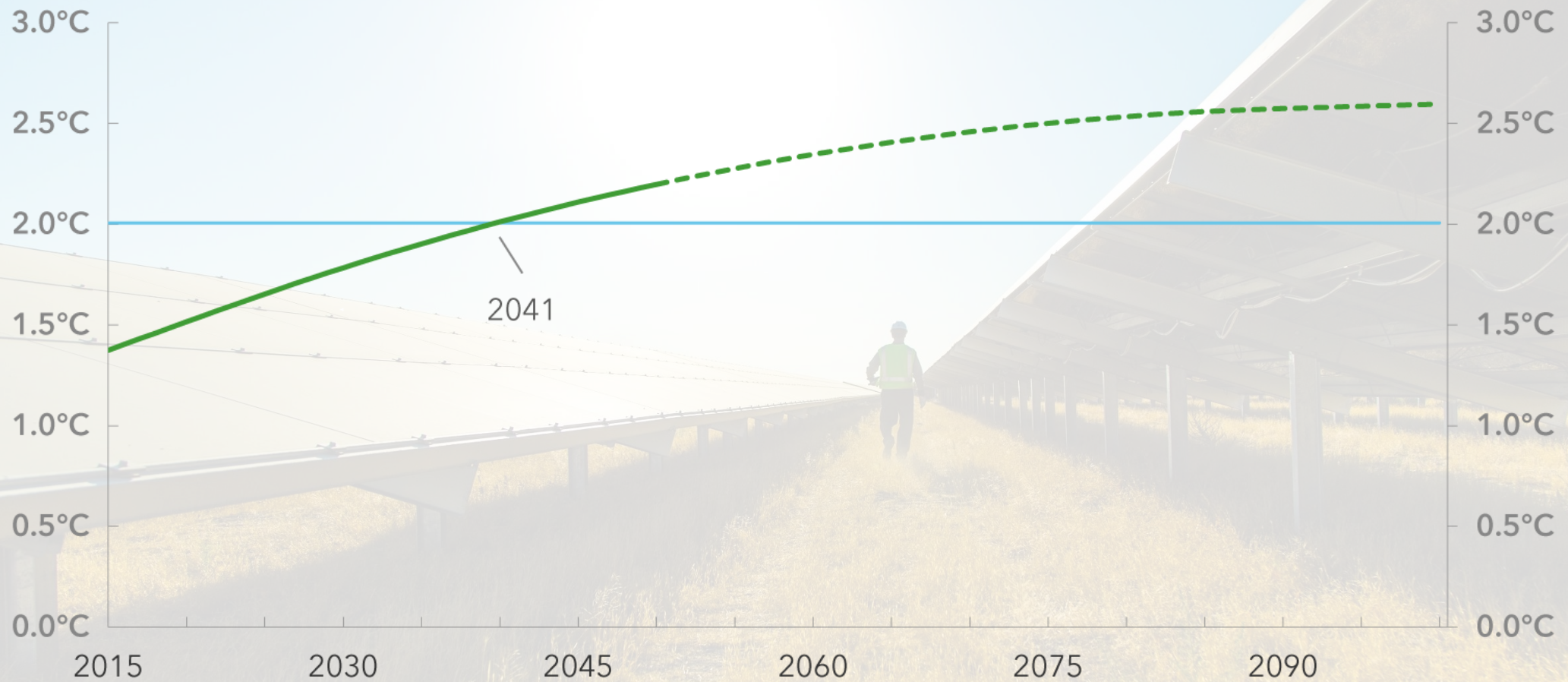
# DECOUPLING OF ECONOMY AND ENERGY USE

Units: Percentages of 2016 levels

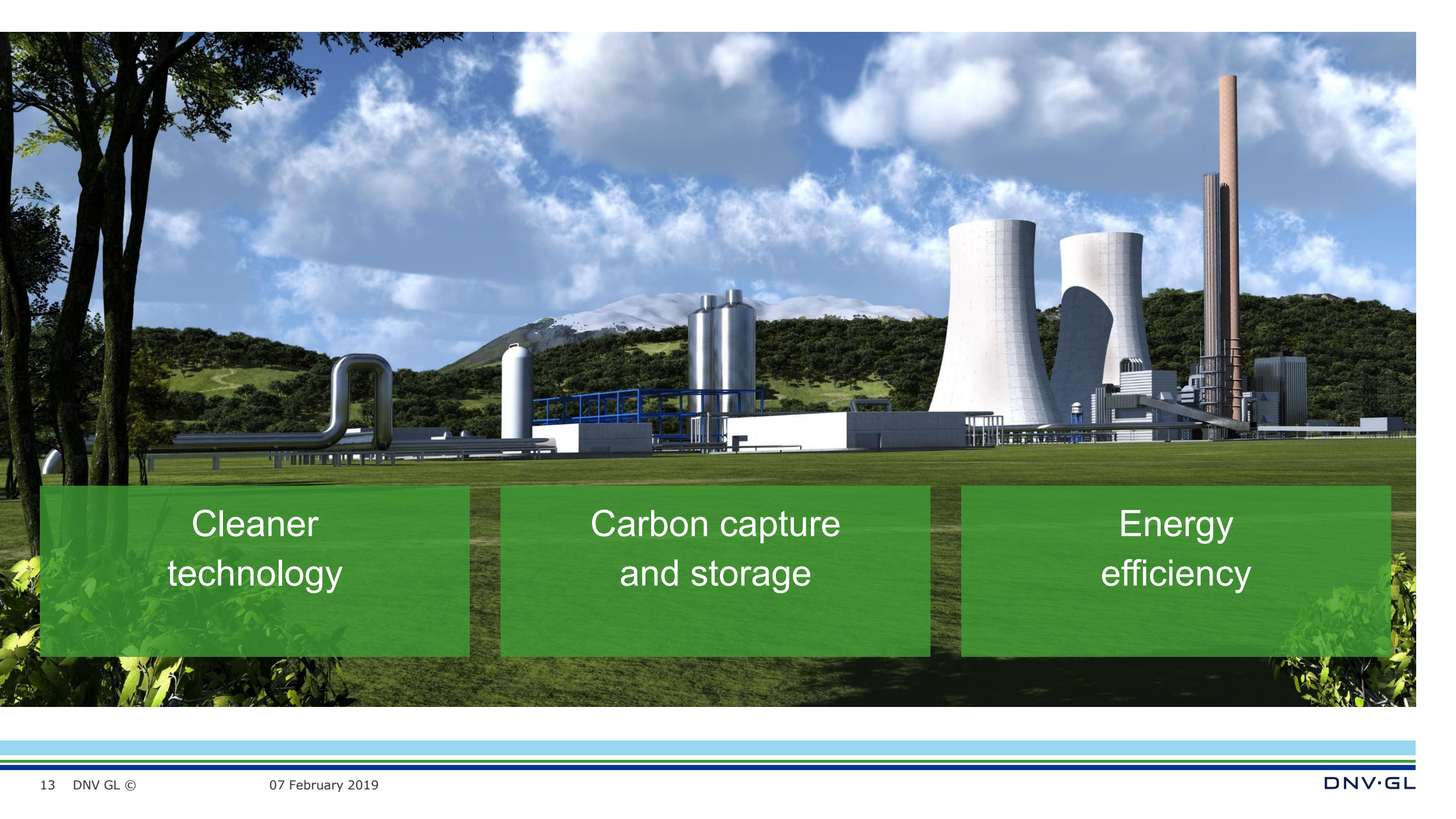




# Global warming and carbon budget







Cleaner  
technology

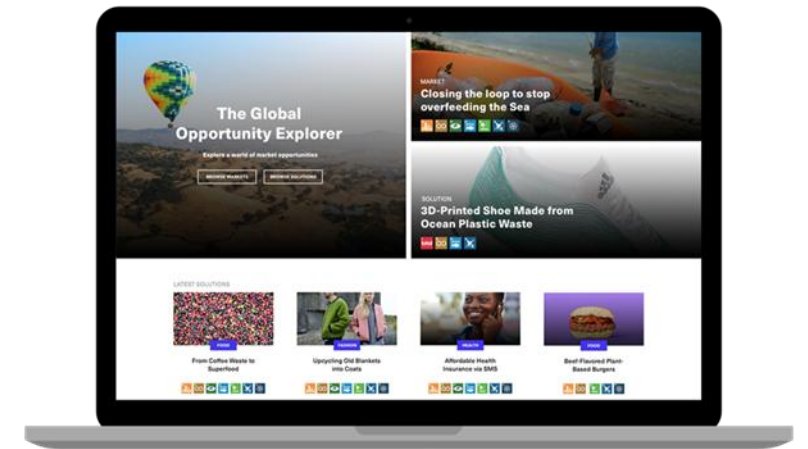
Carbon capture  
and storage

Energy  
efficiency



# 1000 #SDG solutions at your fingertips

## Global Opportunity Explorer INSIGHTS 2019



[www.goexplorer.org](http://www.goexplorer.org)



# Thank you!

## Purpose

To safeguard life, property and the environment

## Vision

Global impact for a safe and sustainable future

