

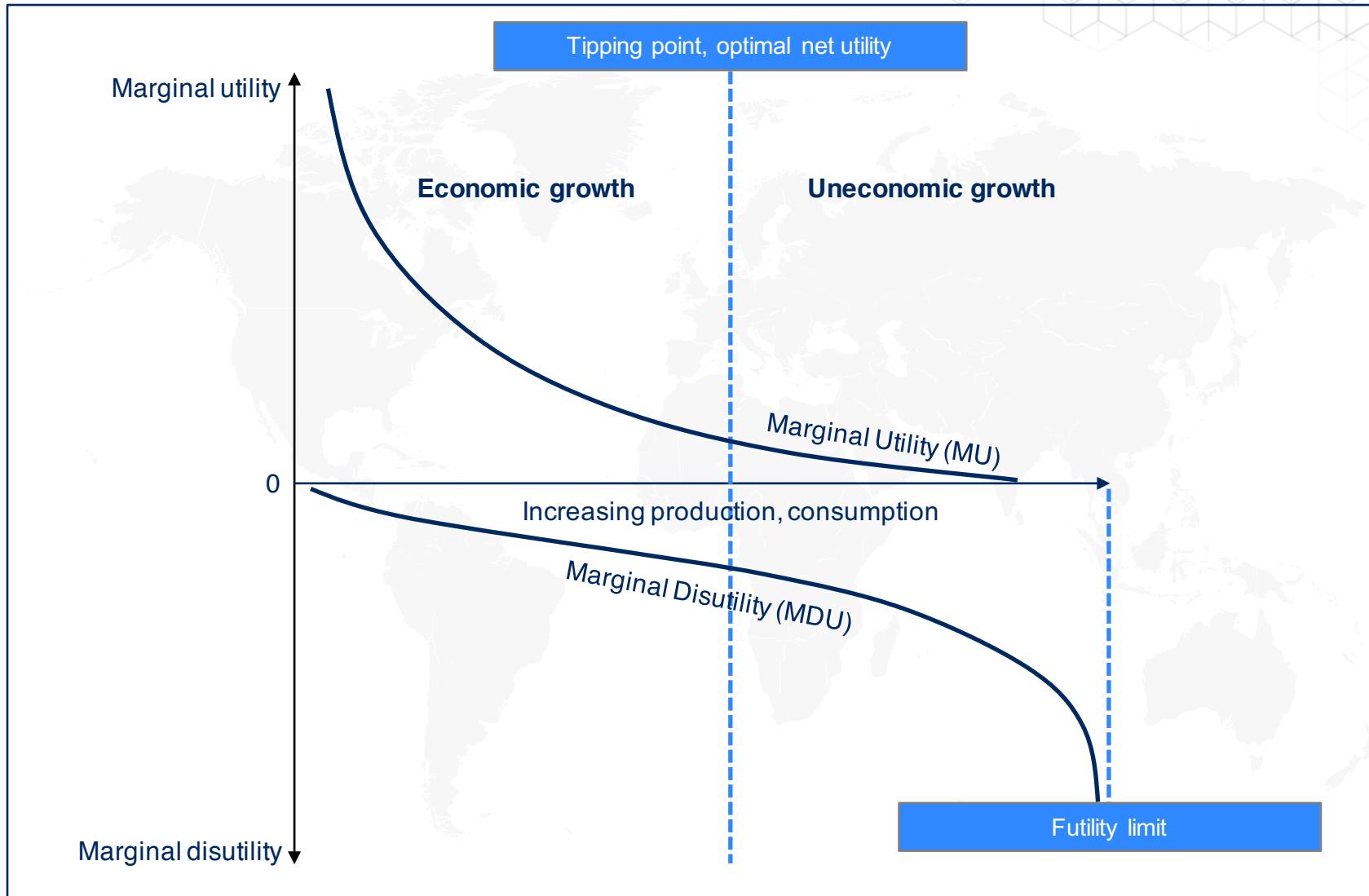
Environment



PURPOSE+

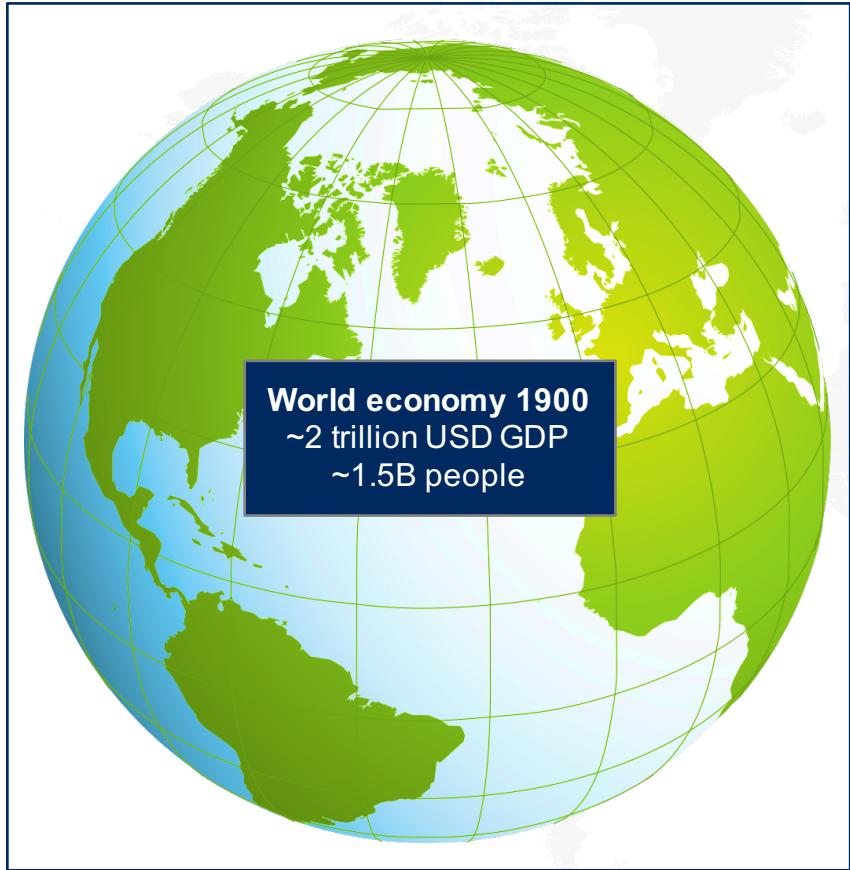
NON-CONFIDENTIAL AND ENTIRELY SHAREABLE
Purpose+, Amstel 95, Amsterdam, The Netherlands

Visual 72: Economic growth has a dark side



Visual 73: From empty world economics to full world economics

From empty world economics...



...to full world economics

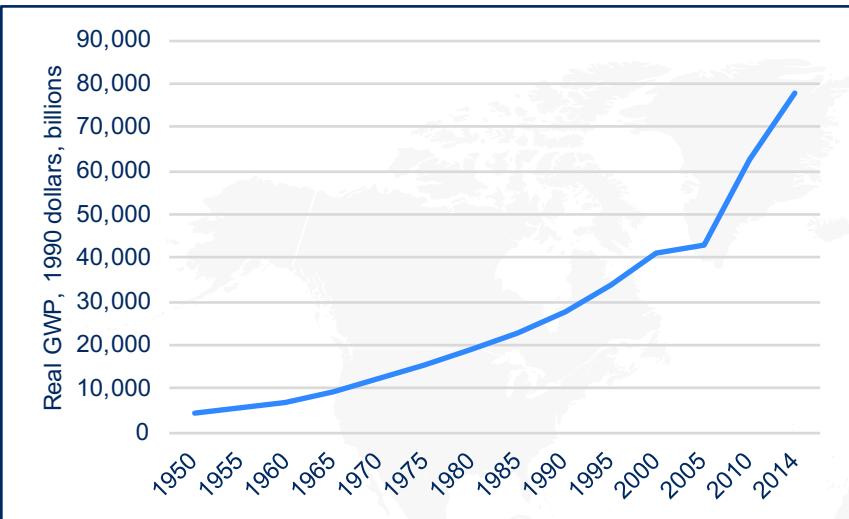


* Note: 1900 numbers are Angus Maddison estimates, in 1990 International Geary-Kharami dollars

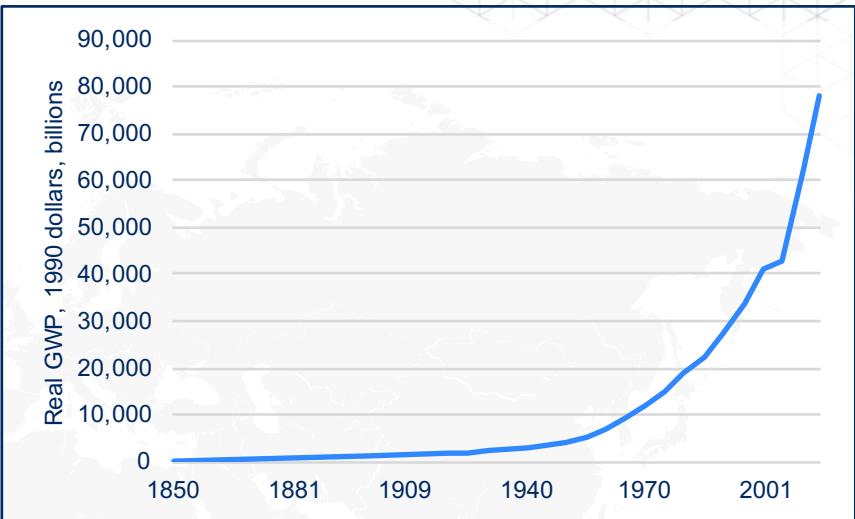
Sources used: Angus Maddison, World Bank, Herman Daly

Visual 74: Economic growth seen as a shock to system earth

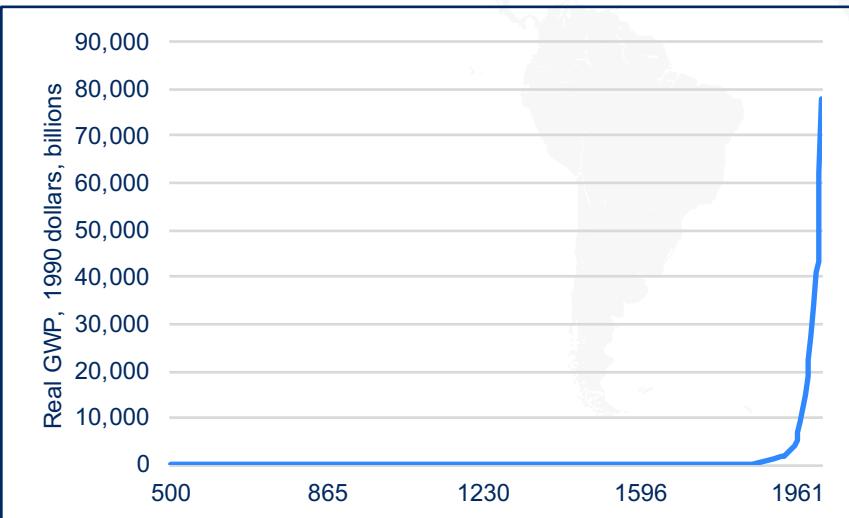
Post WWII perspective...



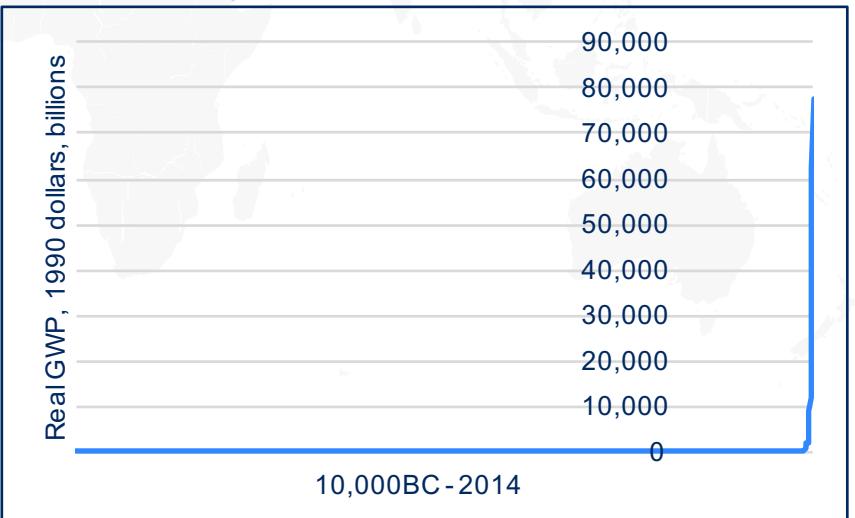
...post industrial revolution...



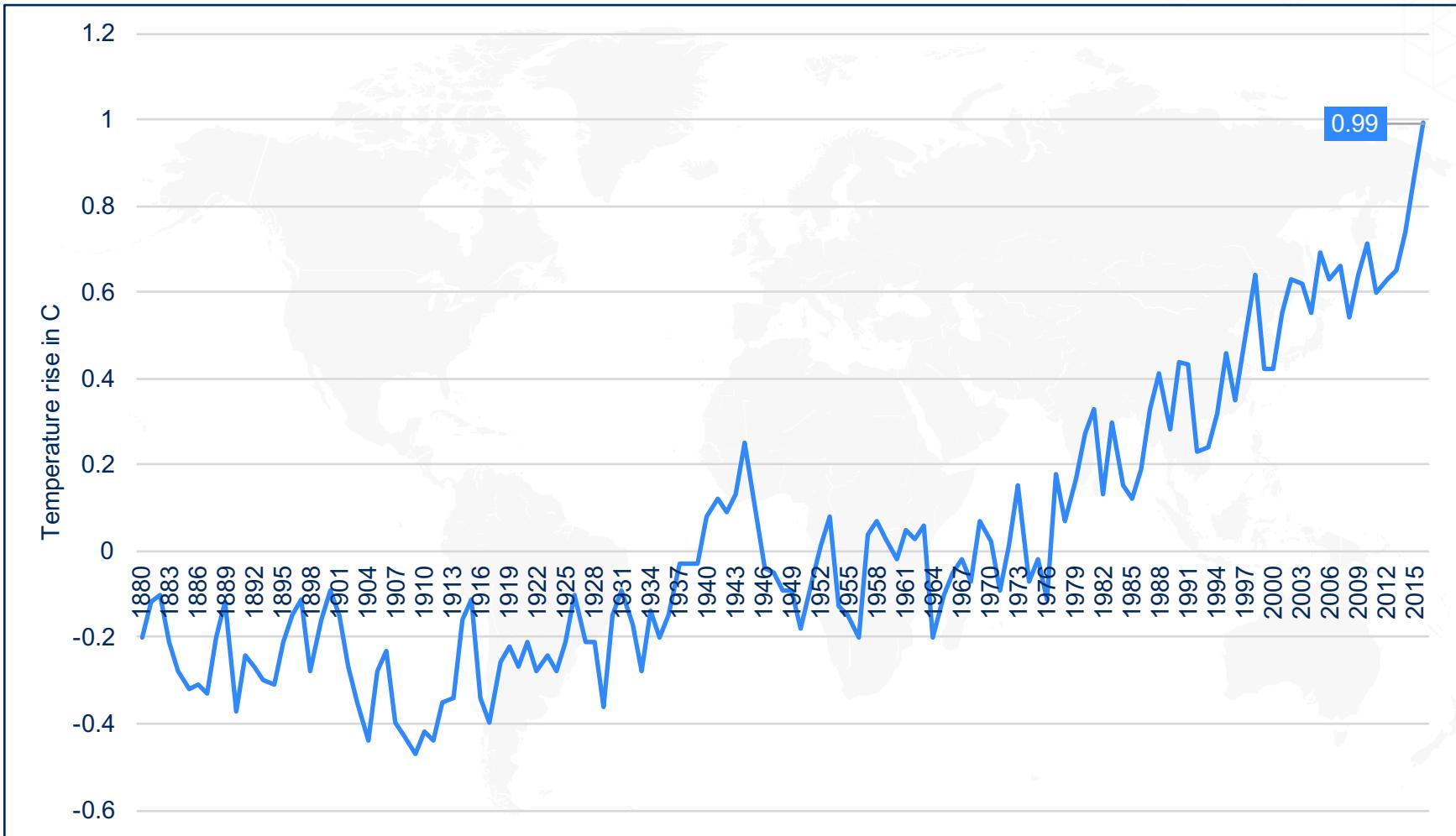
...post Roman civilisation...



...and the post agricultural revolution perspective.



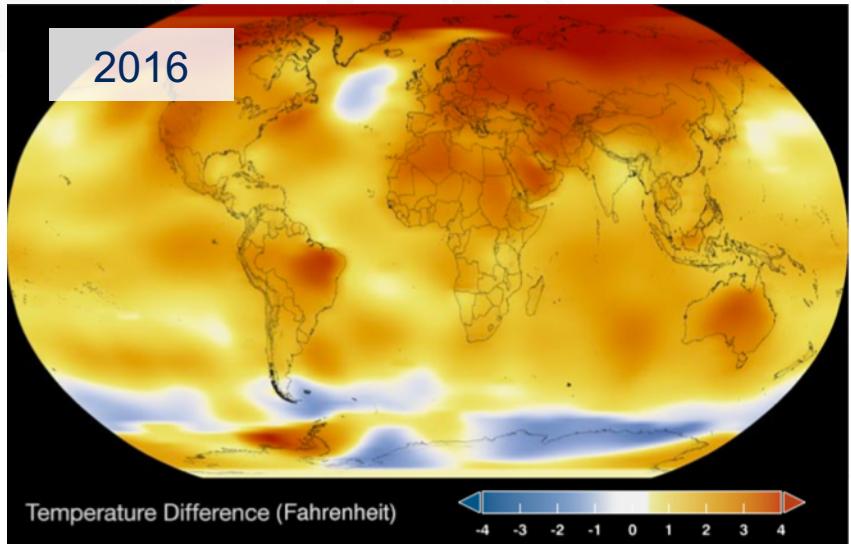
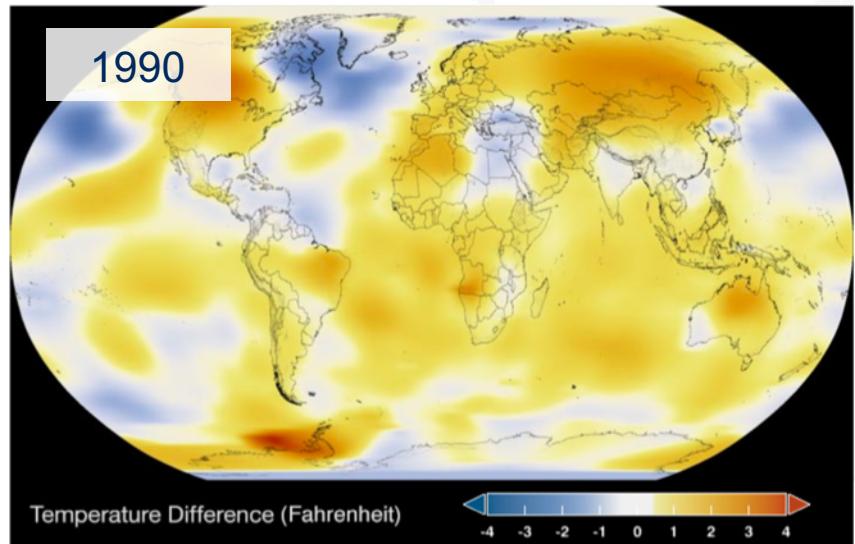
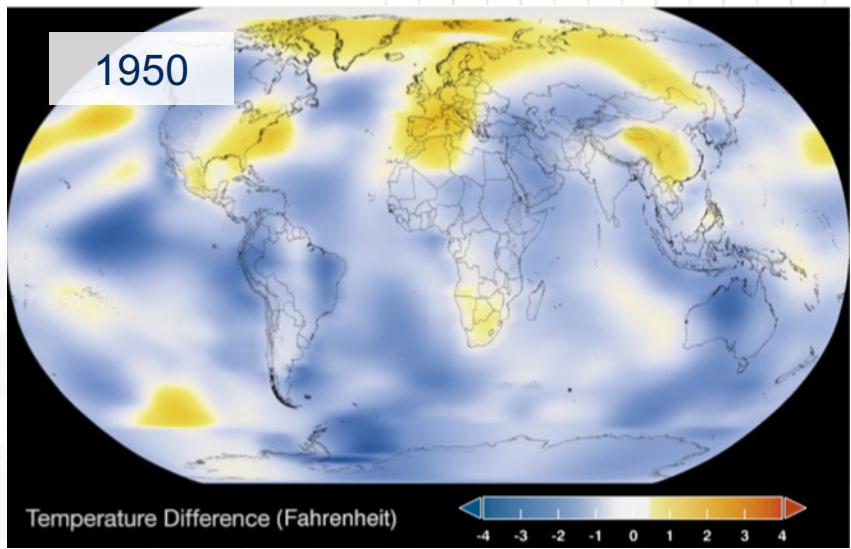
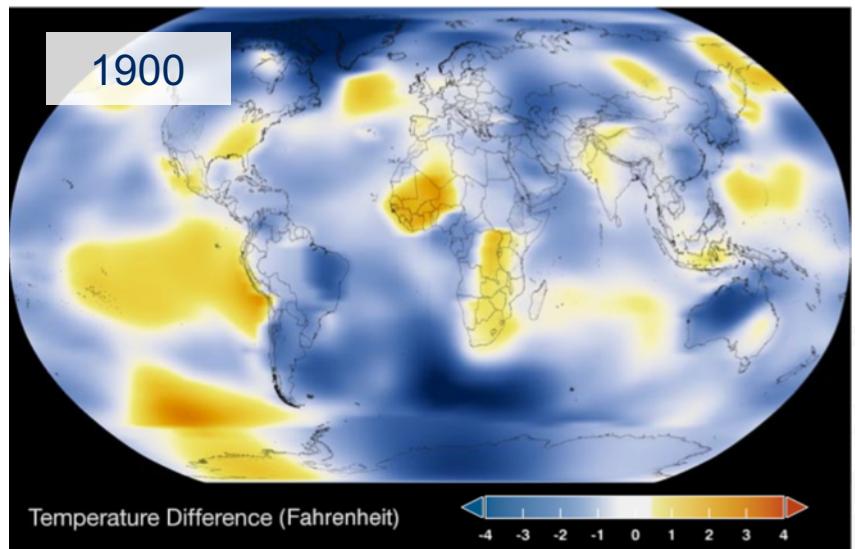
Visual 75: Global temperatures are up by 1C



Source: NASA (August, 2017)

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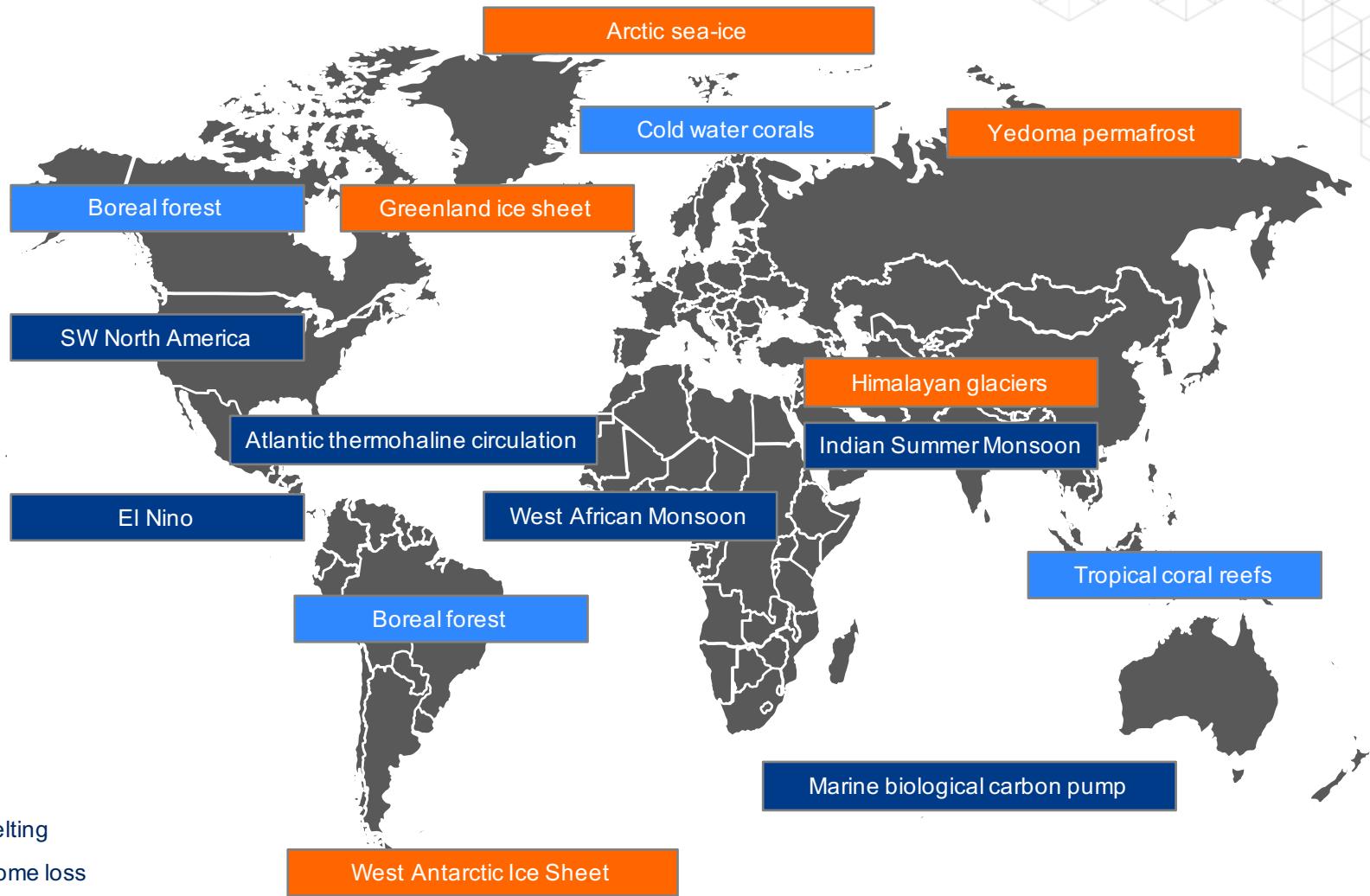
Visual 76: Warming effects can differ per region



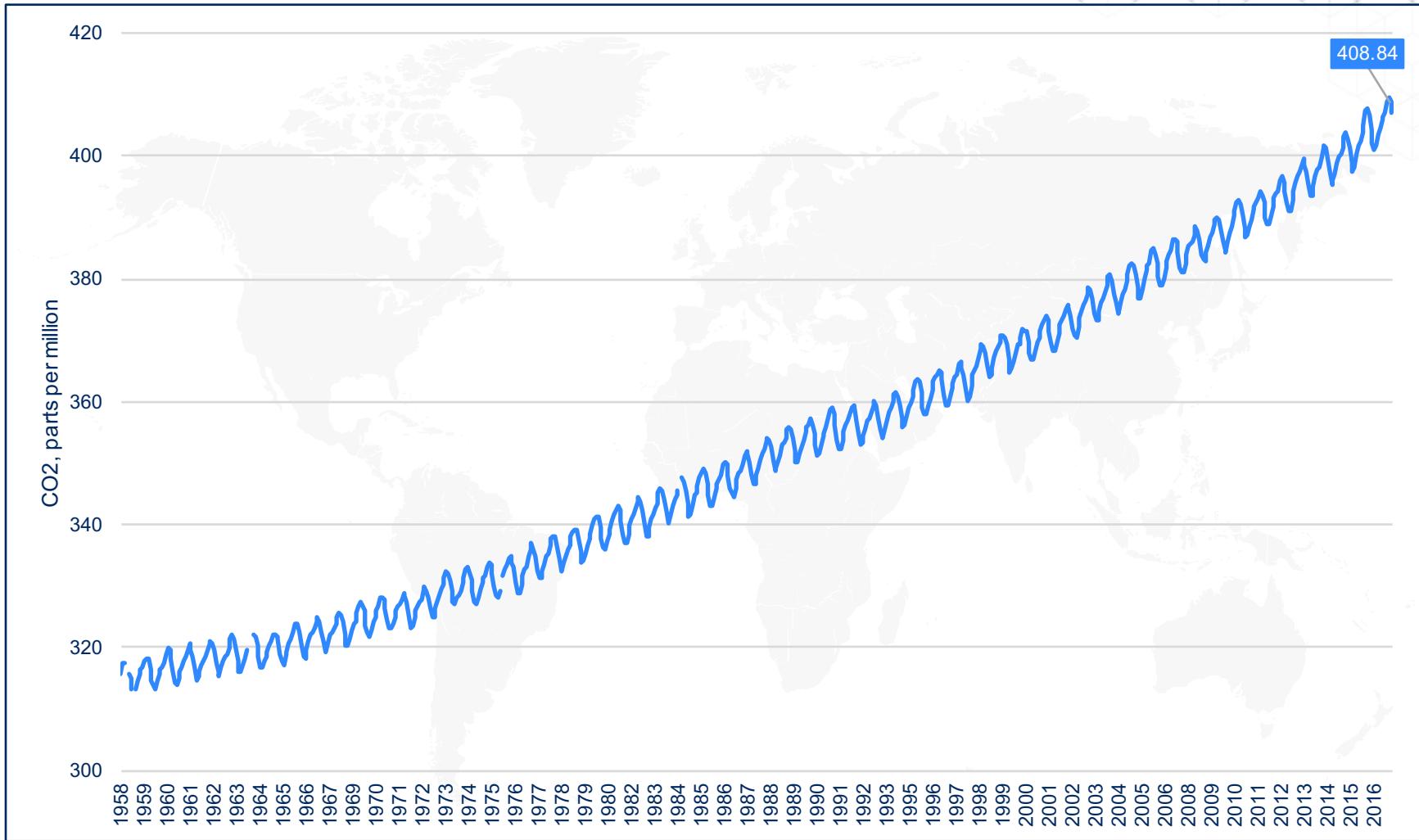
Source: NASA (August, 2017)

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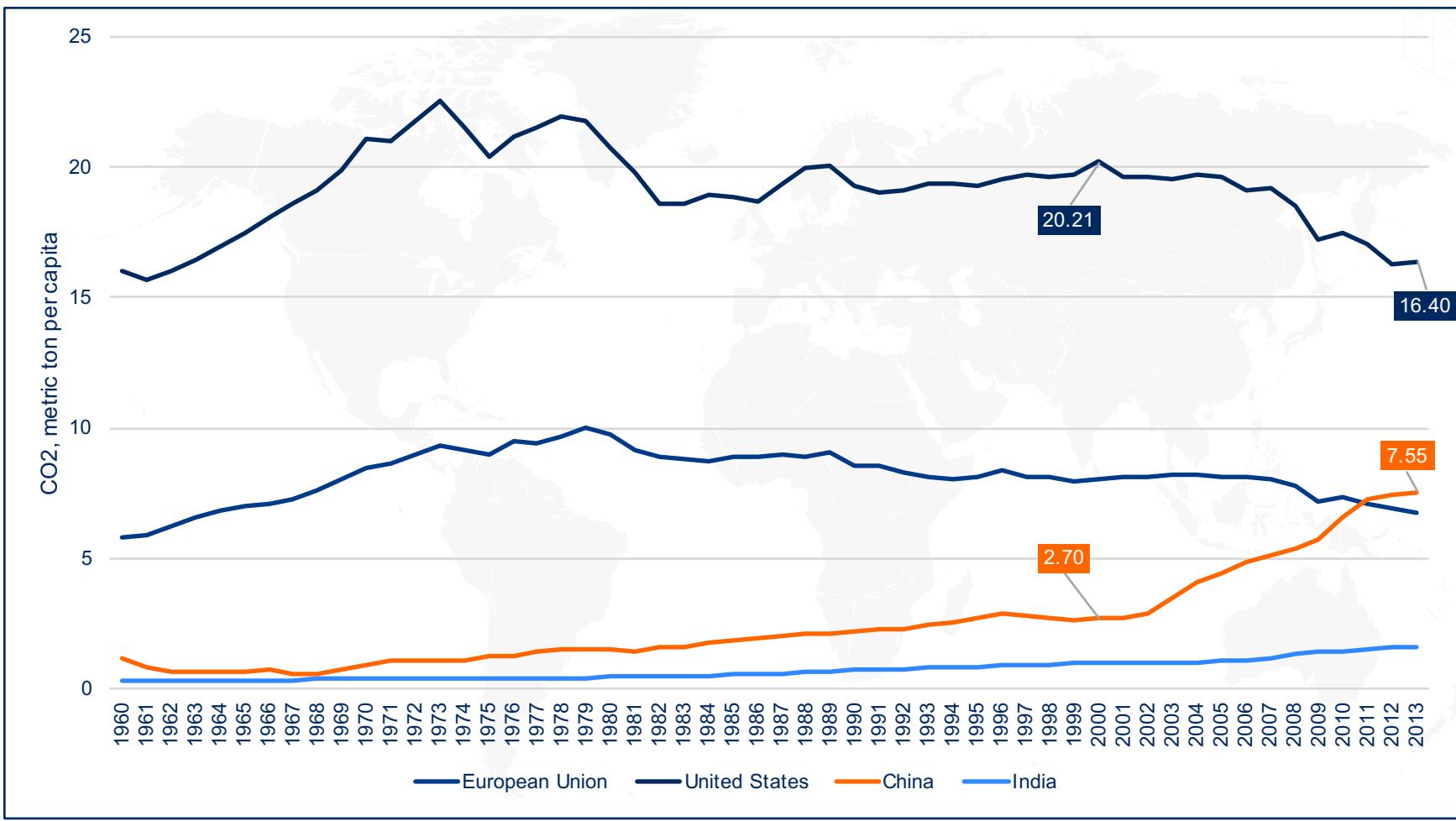
Visual 77: The potential tipping points impacting global warming



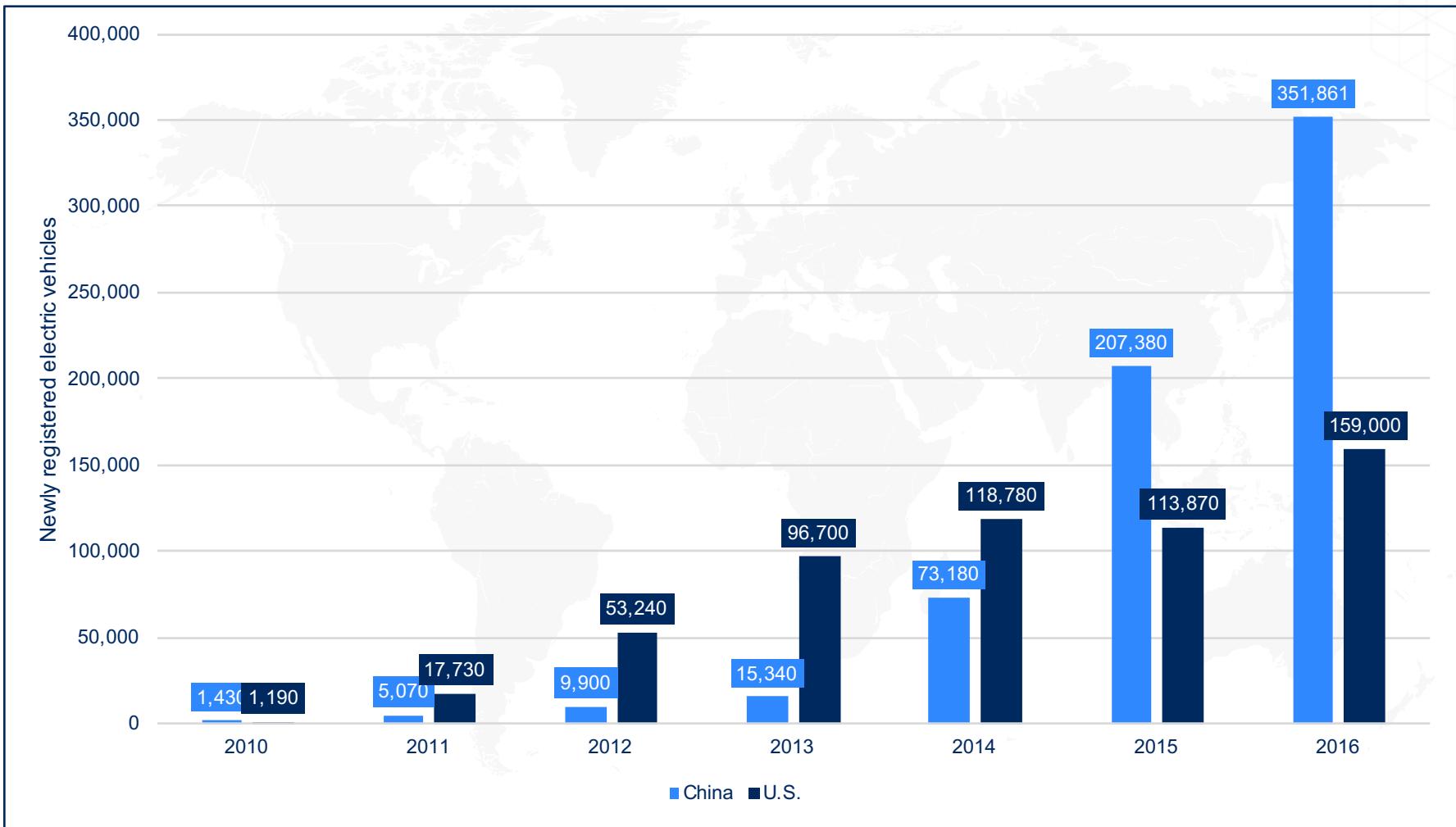
Visual 78: CO₂ levels in the atmosphere have steadily risen over time



Visual 79: Advanced economies are the major polluters today

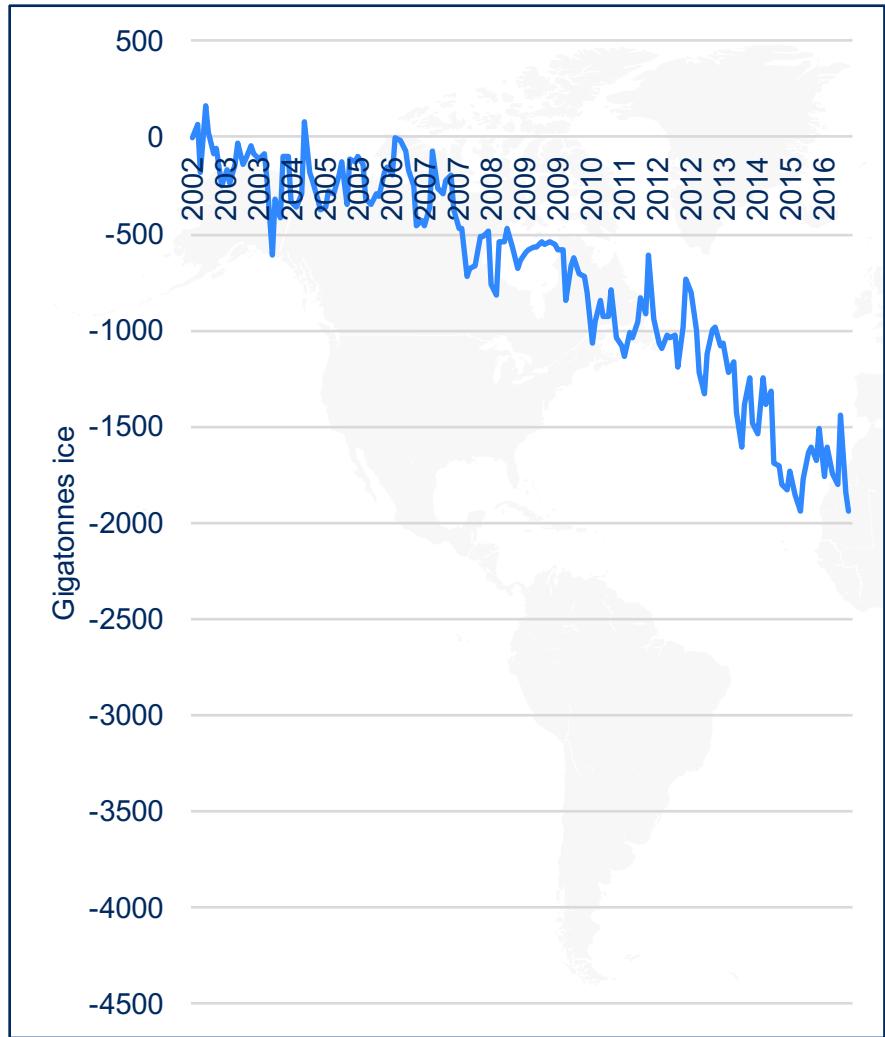


Visual 80: China is in the lead when it comes to electric vehicles

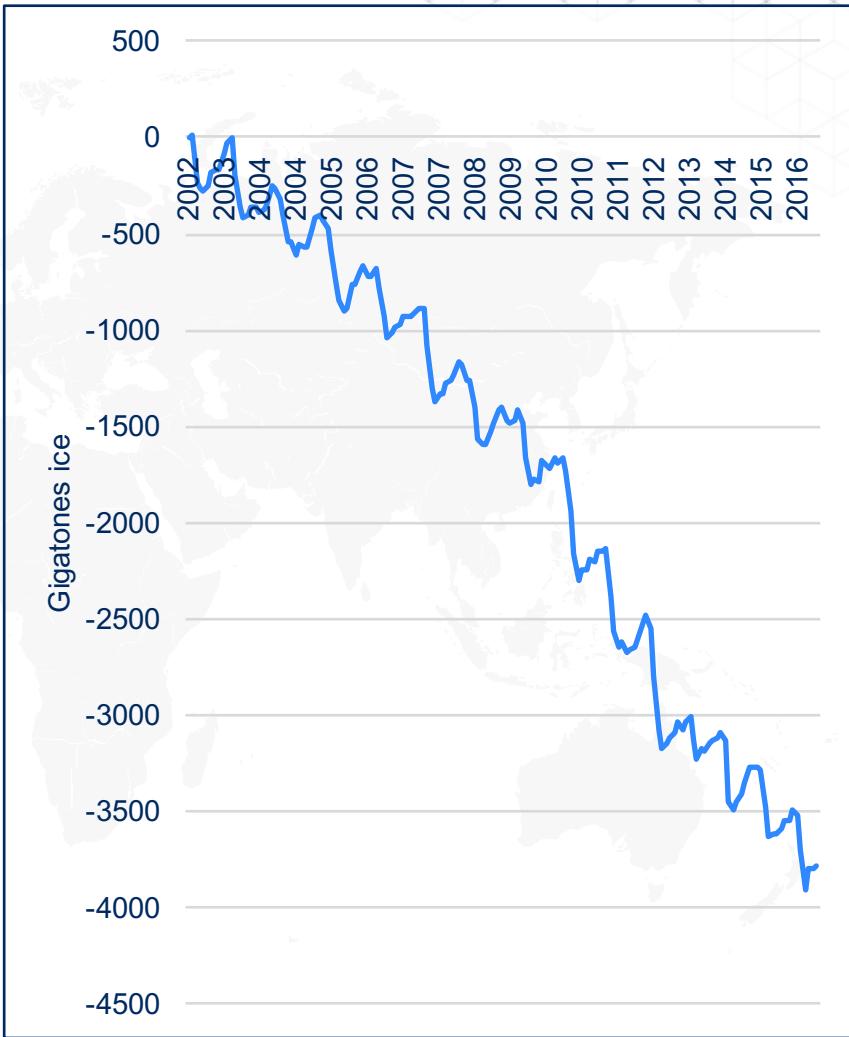


Visual 81: Global ice mass is falling rapidly

Arctic, or North Pole...



...and Greenland

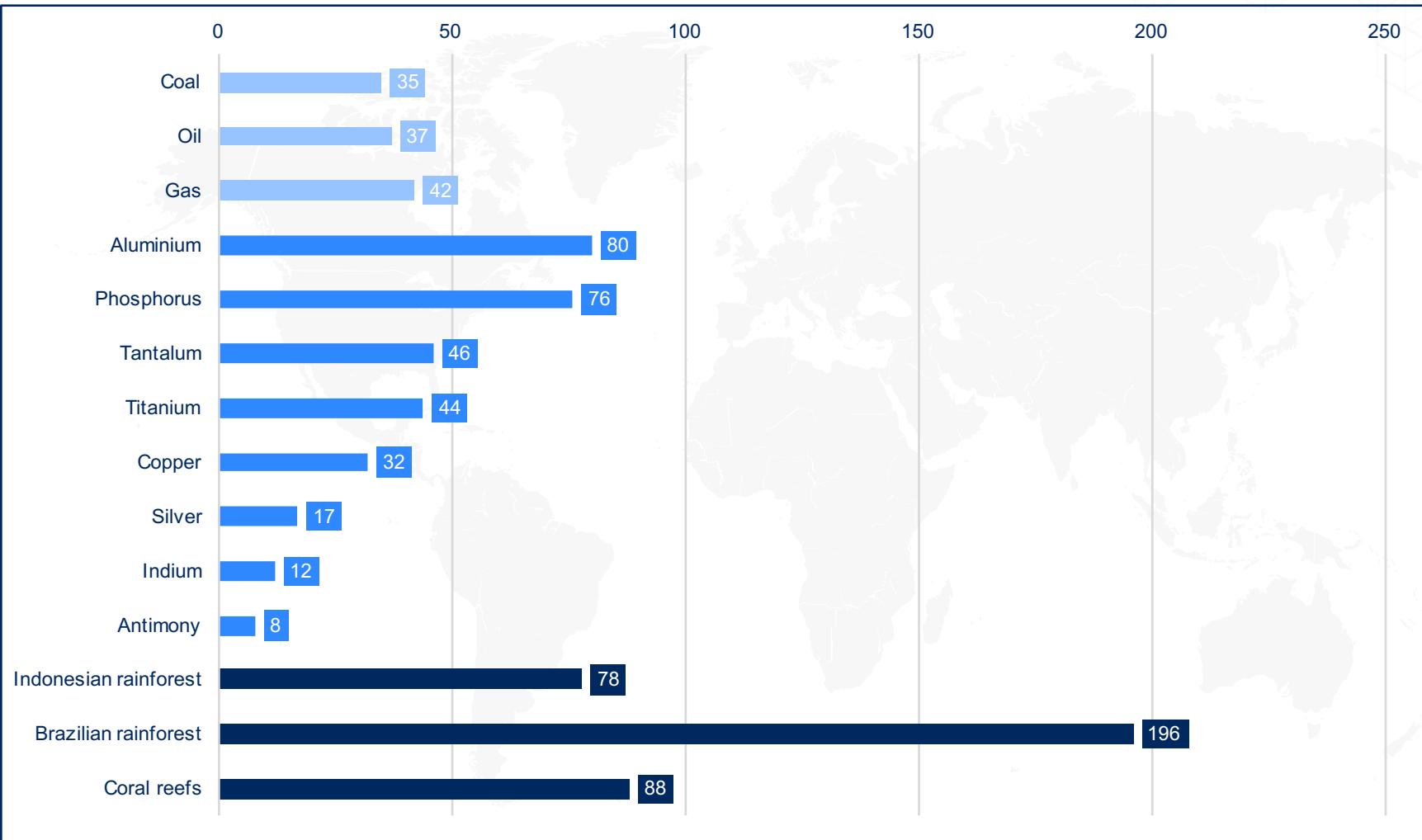


Source: NASA (August, 2017), data from GRACE satellites

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Visual 82: Some resources will be depleted within a generation

Ecosystems
Minerals
Fossil fuels



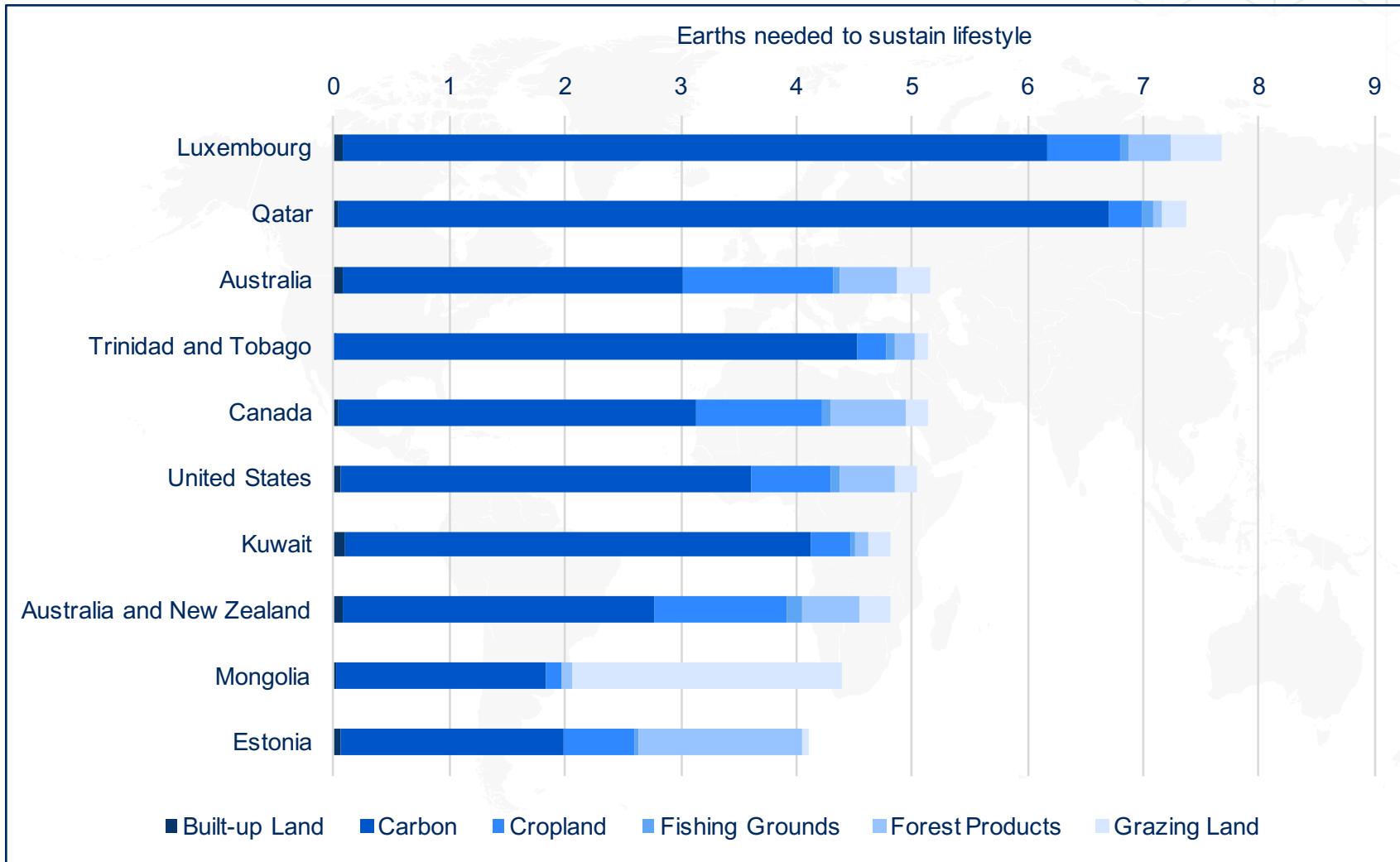
Note: assumed fixed % increase in usage per year

Source: BBC (2012), Global Resources Stock Check; Information is Beautiful

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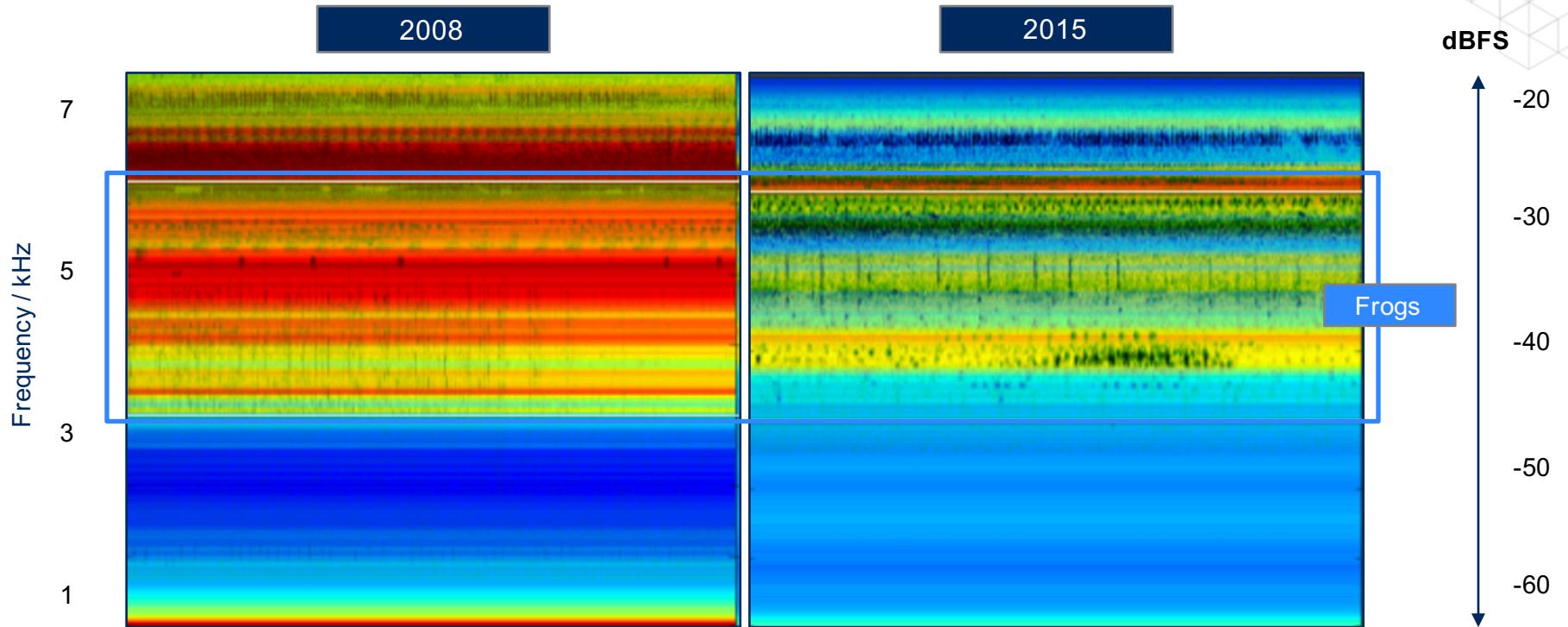
Visual 83: Our collective footprint is the size of ~1,5 earths

Ecological footprint in number of earths needed to sustain lifestyle, top-10 countries



Visual 84: The forests are becoming silent

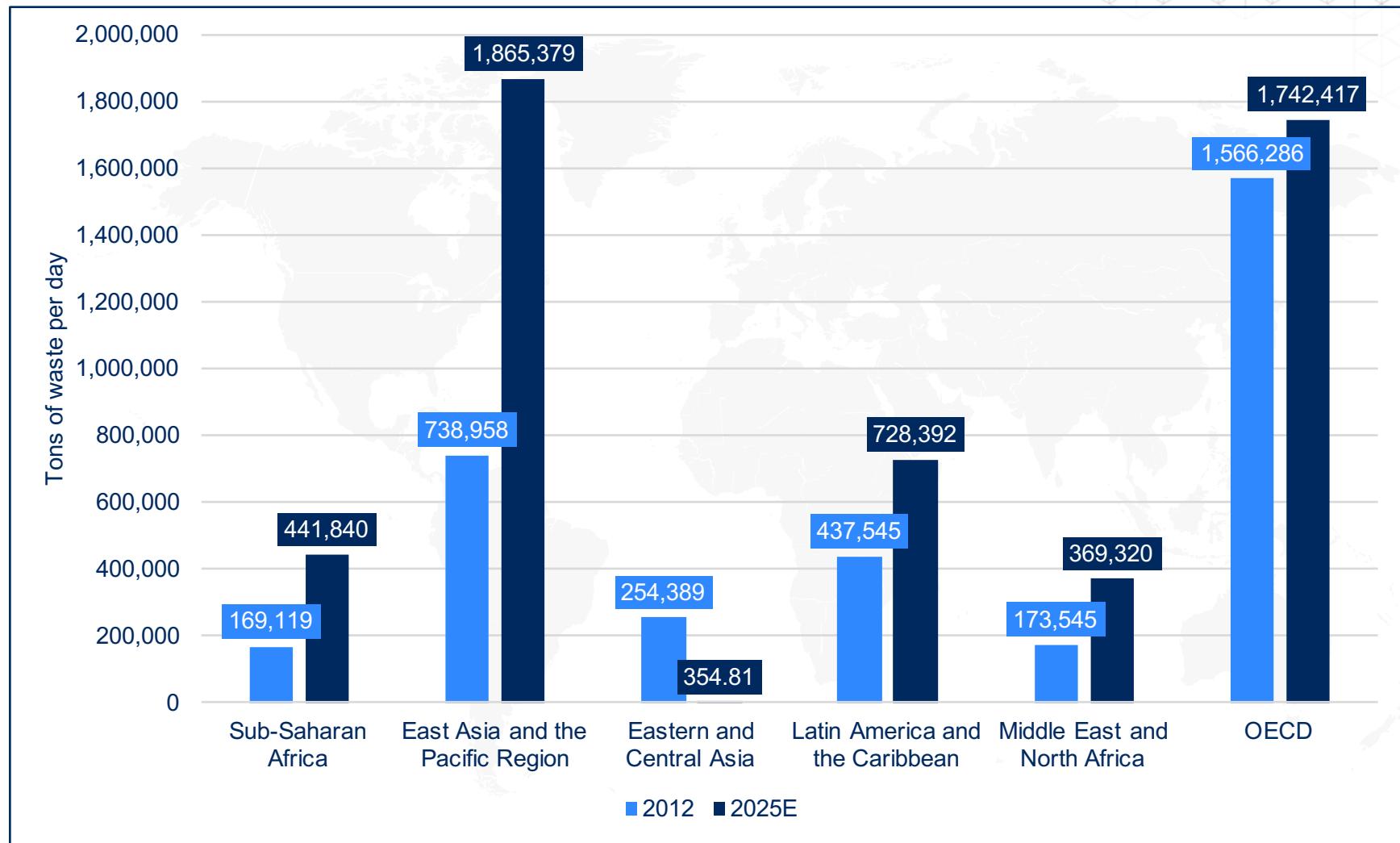
Spectrogram of Costa Rican rainforest, 2008 vs 2015 (red is more sound, blue is quiet)



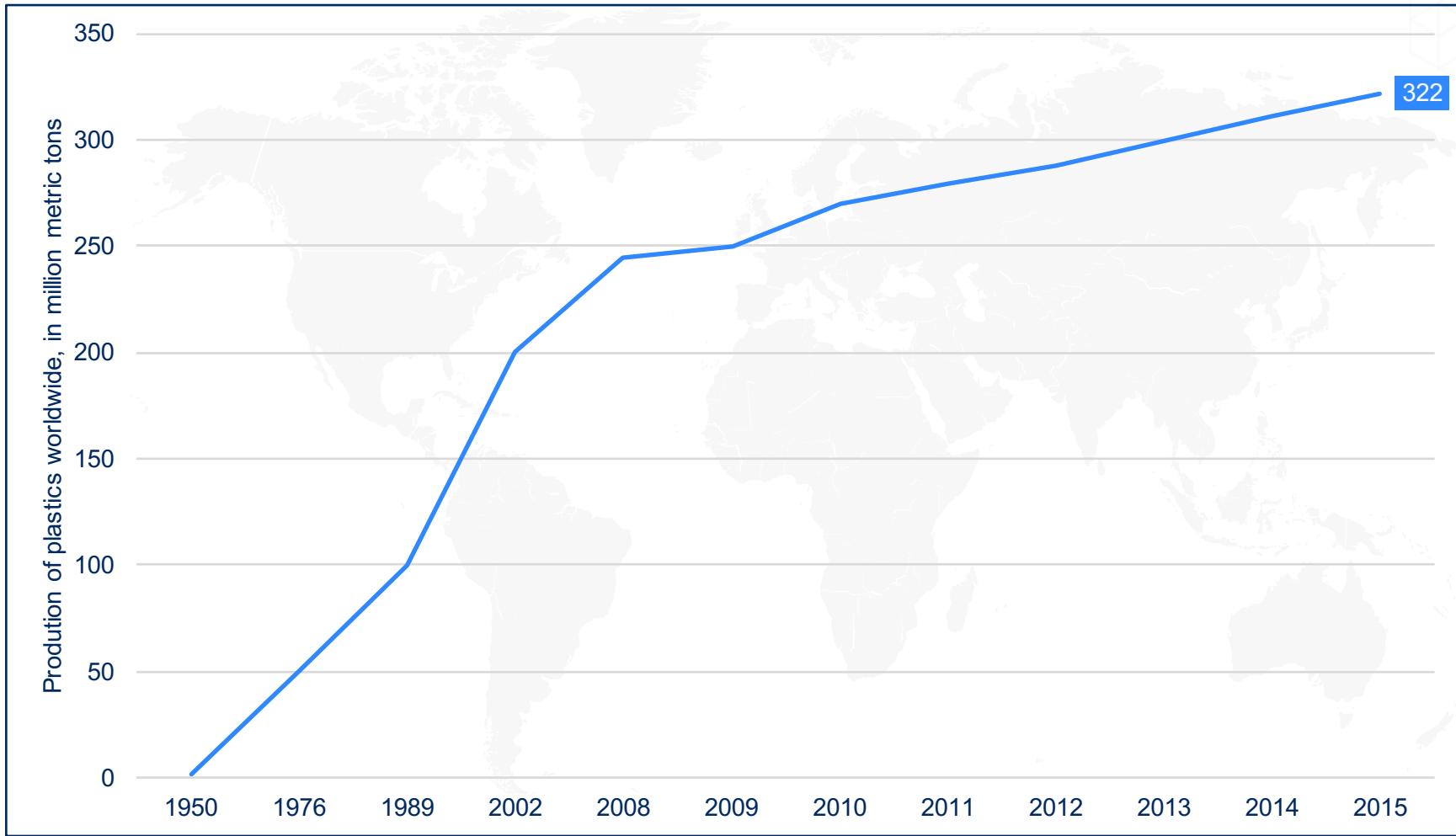
Source: CNN (2017), Listening for the amphibian apocalypse; Bryan Pijanowski, Purdue University

PURPOSE⁺

Visual 85: Globally, garbage piles are growing in size



Visual 86: Plastics have become the 'go to' material in just ~60 years



Source: PlasticsEurope (PEMRG), 2016

PURPOSE⁺

For more information



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