Transforming Knowledge for Climate Action

futureearth
research for global sustainability

PREP - Visualising data to build climate resilience

PARTNERSHIP FOR RESILIENCE &PREPAREDNESS

Leading with: WORLD RESOURCES INSTITUTE

The problem:
Demand for climate information is on the rise, but data are often hard to find, access, and use.

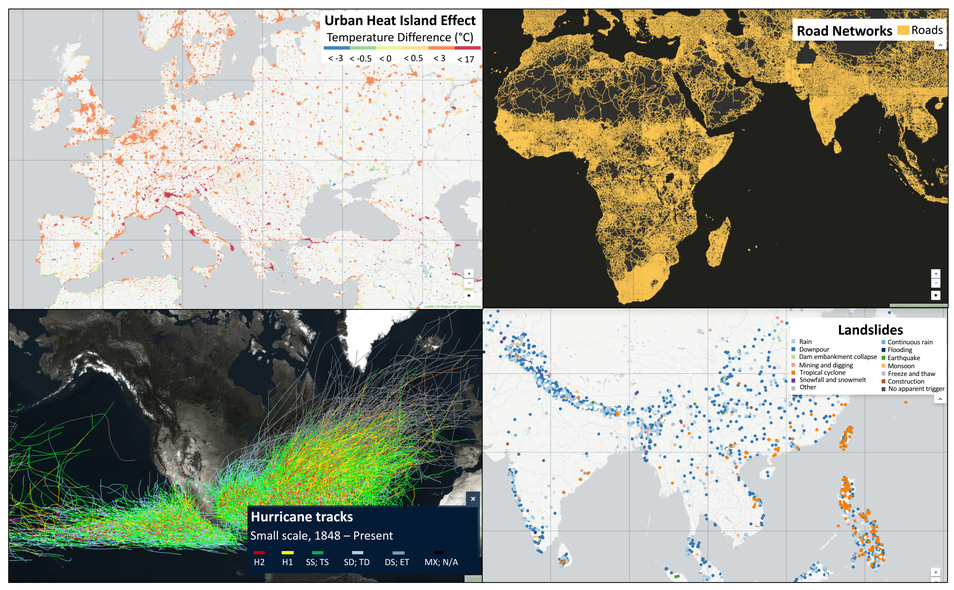
The solution:
Improve access to useful data and empower communities and businesses to better plan for and build climate resilience.

PREP aims to

- Promote dialogue between climate data providers and users
- Solicit input on user needs and data priorities to streamline and curate data for resilience planning
- Improve interoperability across different data products and platforms
- Develop products, creating guidance and supporting PREPdata applications to build capacity for adaptation planning

PREPdata is a map-based, open data online platform that allows users to

- Easily access and use highly credible climate, physical and socioeconomic datasets
- Map and visualise a specific region's vulnerability
- Track the indicators most relevant to their work on customisable dashboards
- Request that data providers add new tools or datasets
- Share their stories with adaptation practitioners around the world



Datasets include:

- Extreme weather events
- Precipitation
- Drought and flood risks
- Social vulnerability
- Coastal energy facilities
- Landslides
- Sea level rise
- Global urban heat island effect
- Reservoir sand dams
- Global cropland extent

For more information, visit prepdata.org or email laura.satkowski@futureearth.org

10 Science Must-Knows on Climate Change – Summarising recent research

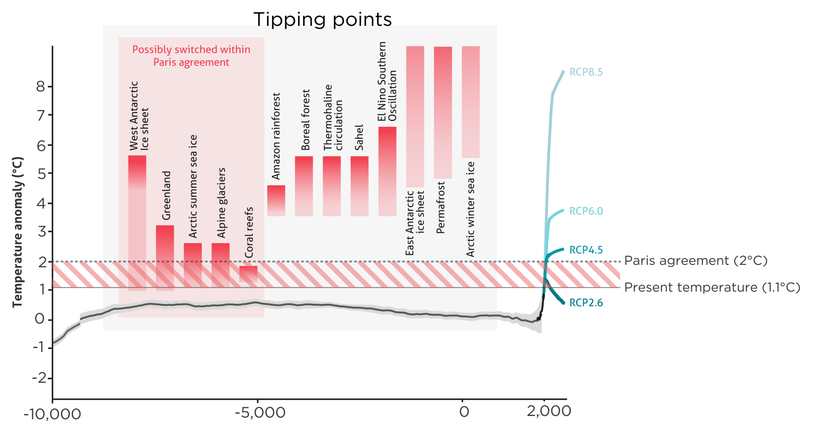
Press conference at COP23
L to R: Johan Rockström (Stockholm Resilience Centre), Nick Nuttall (UNFCCC), Hans Joachim Schellnhuber (PIK), Patricia Espinosa (UNFCCC Executive Secretary) and Wendy Broadgate (Future Earth)

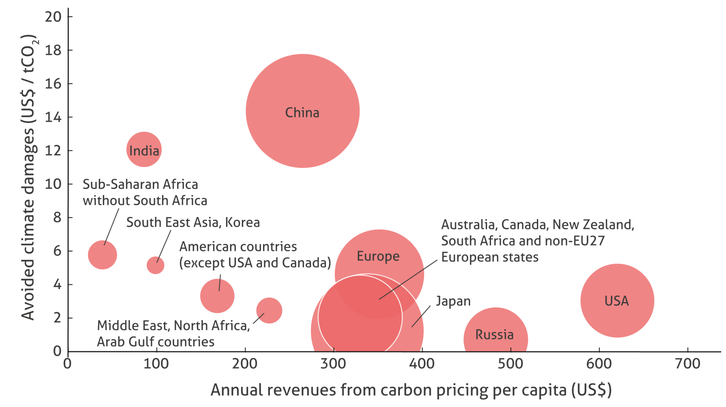
> Some crucial climate change facts tend to get lost in the noise of daily deliberations. It is important to remind everyone of the very reasons why ten thousands of people meet in Bonn: unprecedented risk to humanity due to global warming, as revealed by science. This must be the starting point for re-thinking what in the past 70 years has become our culture of short-term convenience and consumption, a culture which eventually comes at the cost of the well-being of present and future generations across the world.
>
> Hans Joachim Schellnhuber

Brings together Earth-system science and economic research to highlight ten facts which are key to climate negotiations:

Partners:

1. We are in the Anthropocene – Humans are a dominant force on the planet
2. Earth is approaching tipping points due to human pressures
3. The increasing extreme weather risks
4. The growing threat of rising sea levels and ocean acidification
5. The economic costs are already being felt – and will increase
6. Human health is at risk
7. The exacerbation of large-scale migration and civil unrest
8. The world needs to act faster
9. Nation states should cooperate and coordinate mitigation efforts – e.g. carbon pricing
10. Adaptation and resilience building are necessary





For more information, visit futureearth.org/news/cop23-10-science-must-knows-climate-change or email kaela.slavik@futureearth.org

Carbon Law Accelerator - Catalysing action at company and city

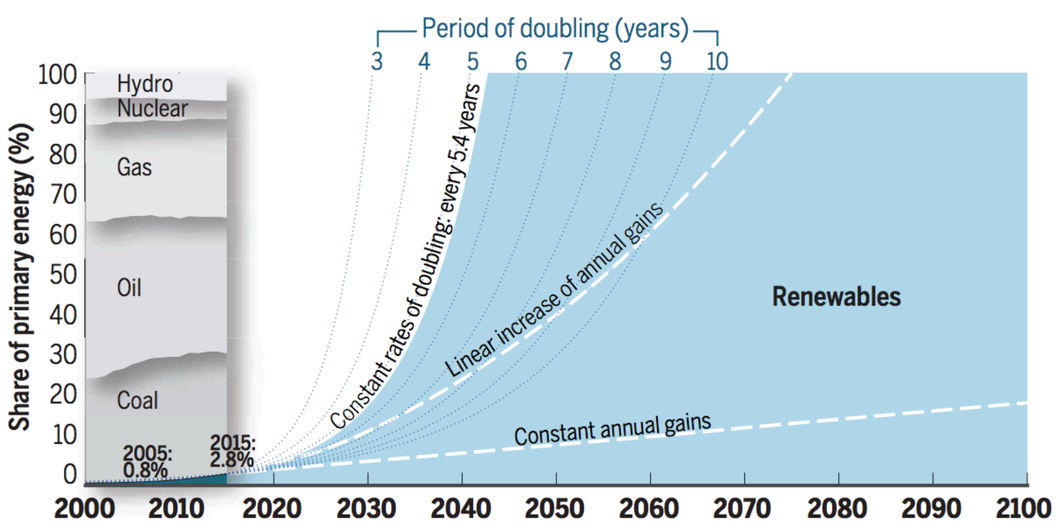
Who?	A consortium of industry leaders, research institutes and NGOs
Target?	Leadership within the digital sector
Goal?	To move from incremental to exponential action on climate across the global economy
Outcome?	A declaration underpinned by a roadmap (a report and online digital tool) to guide exponential progress
Overall goal?	To give ten million engineers in the tech sector the tools to become planetary stewards by 2020

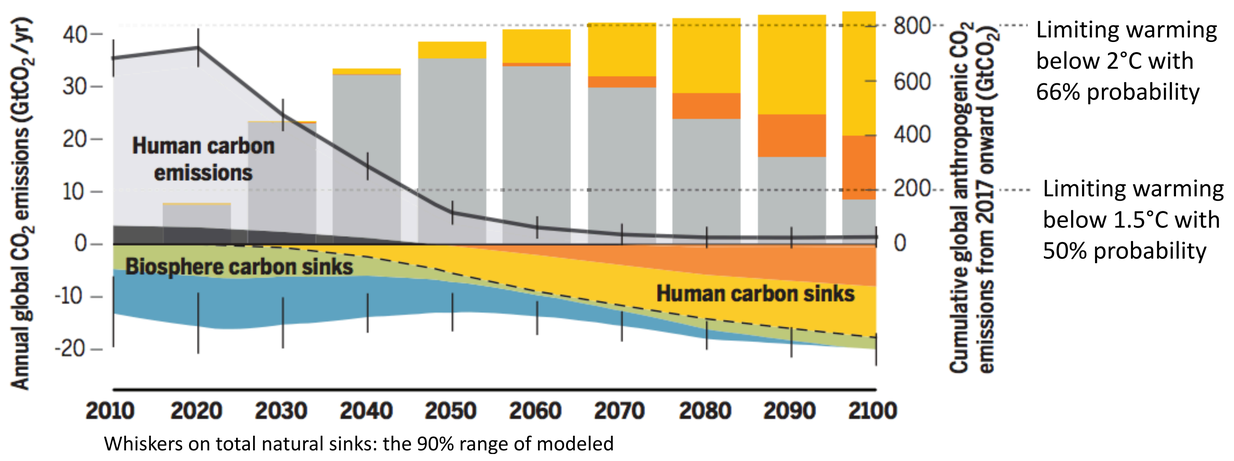
GLOBAL CLIMATE ACTION SUMMIT

- Global emissions need to peak no later than 2020
- Simple "rule of thumb":

Halve emissions every decade to 2050

Partners: M2020 Stockholm Resilience Centre
Research for Governance of Social-Ecological Systems





Whiskers on total natural sinks: the 90% range of modeled

Biosphere carbon sink
- Land carbon sink
- Ocean carbon sink

Anthropogenic CO_2 emissions (gross)
- Fossil fuel and industry
- Land use and land-use change

Anthropogenic CO_2 removals
- Land use and land-use change
- Engineering CO_2 sink (BECCS)

For more information, email johan.falk@futureearth.org

Global Research Projects

Global LAND Project · MAIRS Monsoon Asia Integrated Research on Sustainability · PAGES Past Global Changes · pecs Programme on Ecosystem Change and Society · ileaps · IMBeR · solas · futureearth coasts · AIMES · bioDISCOVERY · bioGENESIS · People, Places, and the Planet · Earth System Governance · Global Mountain Biodiversity Assessment · IGAC · oneHEALTH · IHOPE Integrated History and future Of People on Earth · waterfuture Sustainable Water Future Programme · IRG-PROJECT Integrated Risk Governance Project · ecoSERVICES · Global Carbon Project