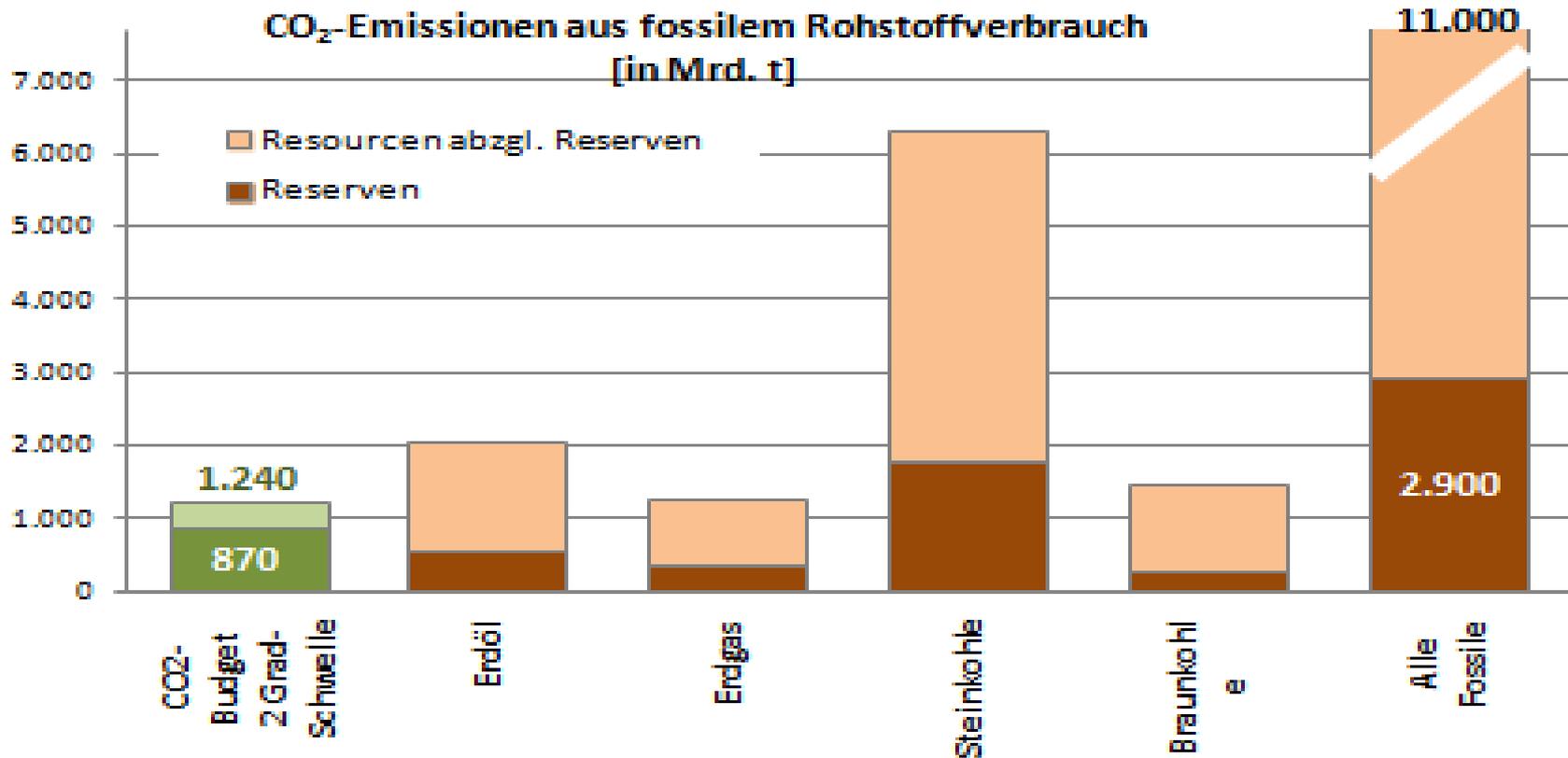


UN-CLIMATE SUMMIT PARIS:

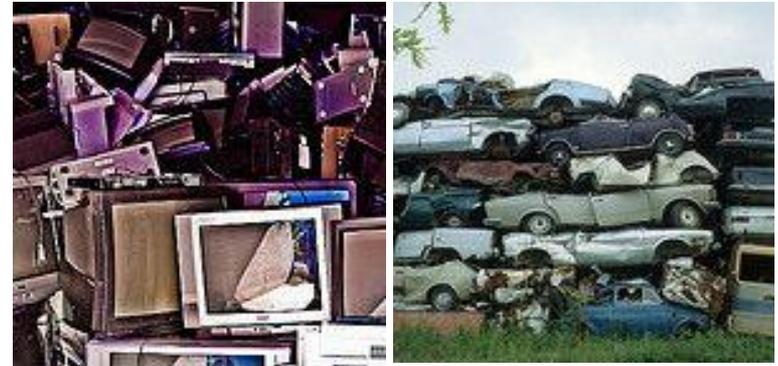
- Keep global warming below plus 1,5°, at least below 2°
- Reduction of global greenhouse-gas-emissions by 50% until 2050
- Reduction target for high industrialized countries: 80-90%
- Decarbonization!! Leave 80% of fossil fuel reserves in the ground

Carbon Budget vs. Bubble



Decoupling Growth from Environmental Degradation

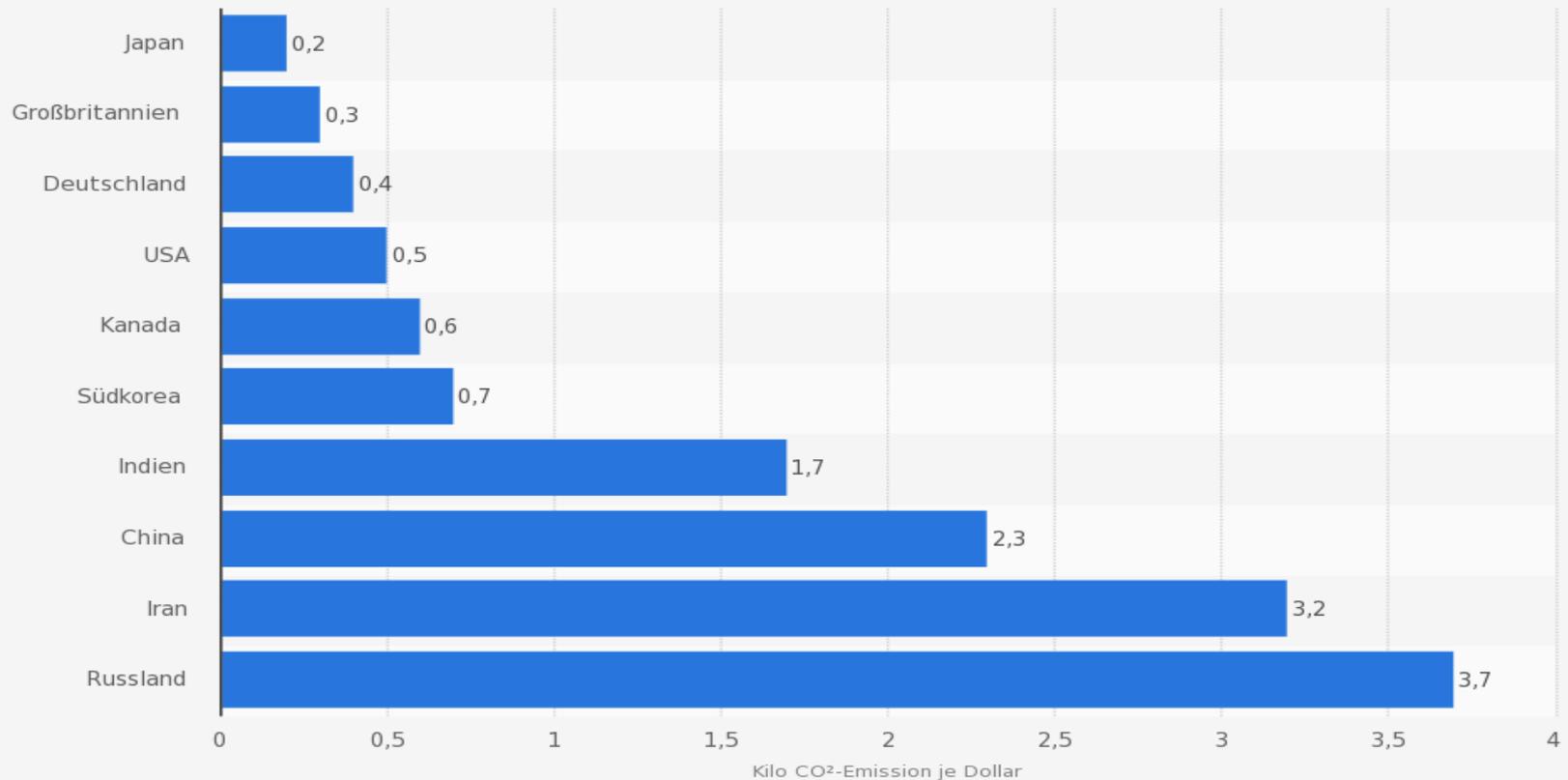
- Efficiency Revolution: Making more out of less
- Energy Revolution: Renewable Energies, Photosynthetics
- Circular Economy: Zero Waste, Cradle to Cradle)



Efficiency matters!

CO2-Intensity of GDP

CO²-Emissionen je produzierter BIP-Einheit in ausgewählten Ländern im Jahr 2008 (in Kilo CO² je Dollar)

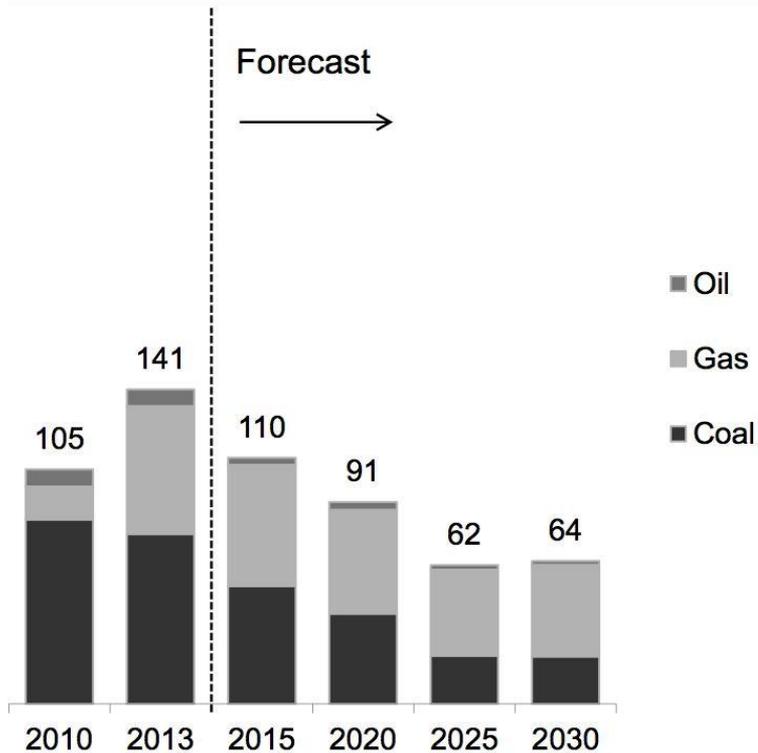


Quellen:
IEA; PIK
© Statista 2016

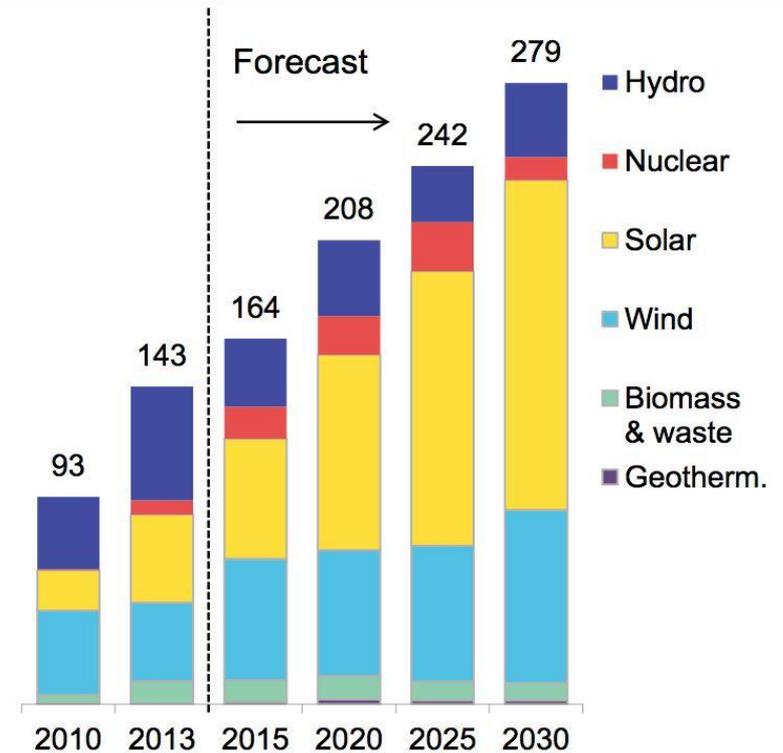
Weitere Informationen:
Weltweit; IEA; PIK

Renewables outpace Fossil Fuels

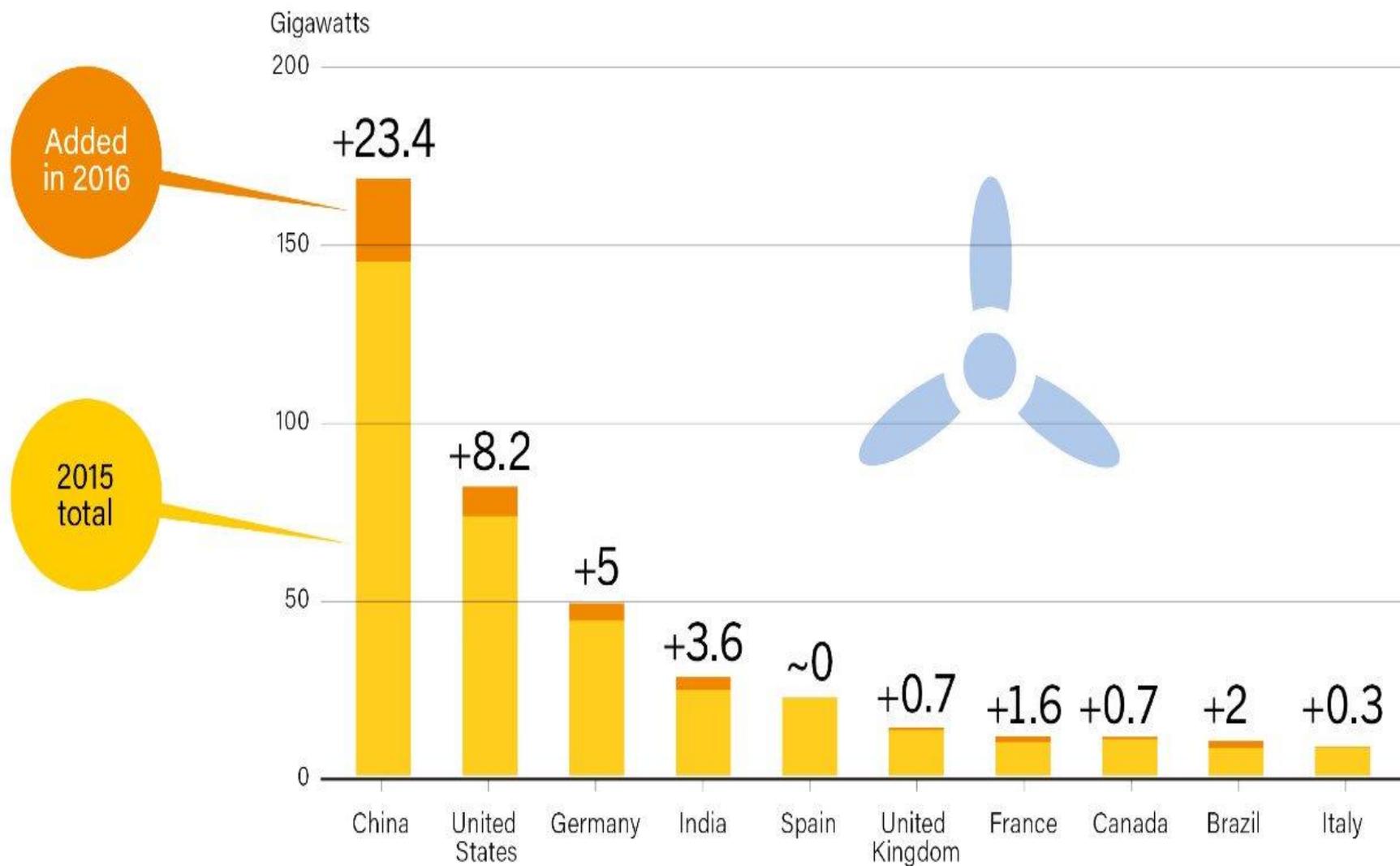
FOSSIL FUEL



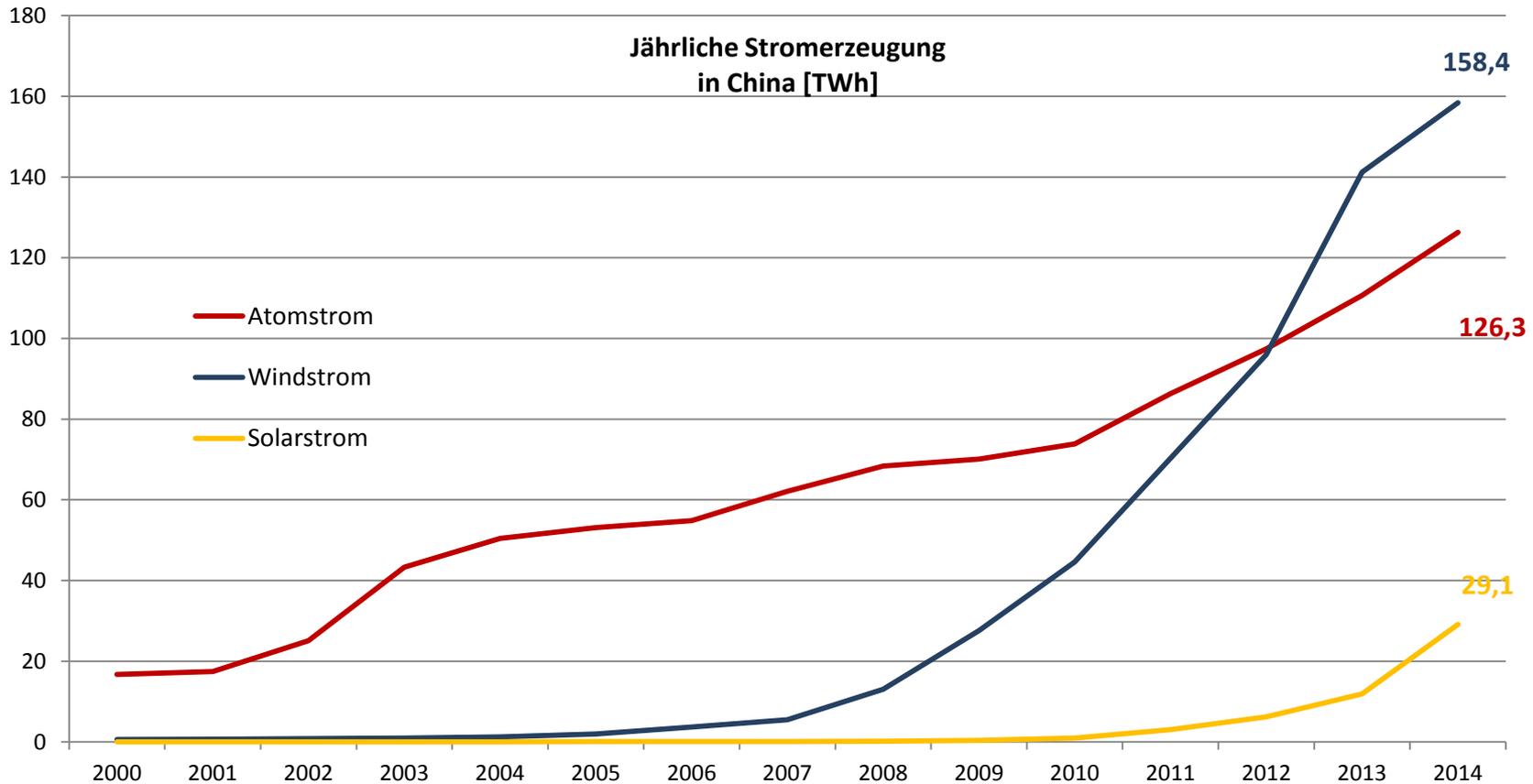
CLEAN ENERGY



Wind Power Capacity and Additions, Top 10 Countries, 2016

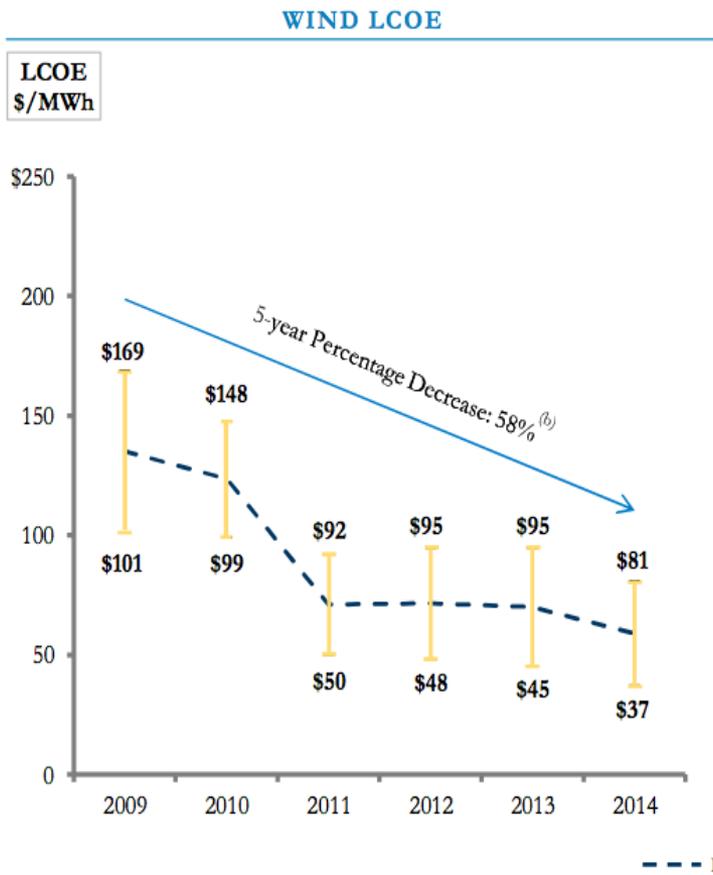


Renewable Power Generation China

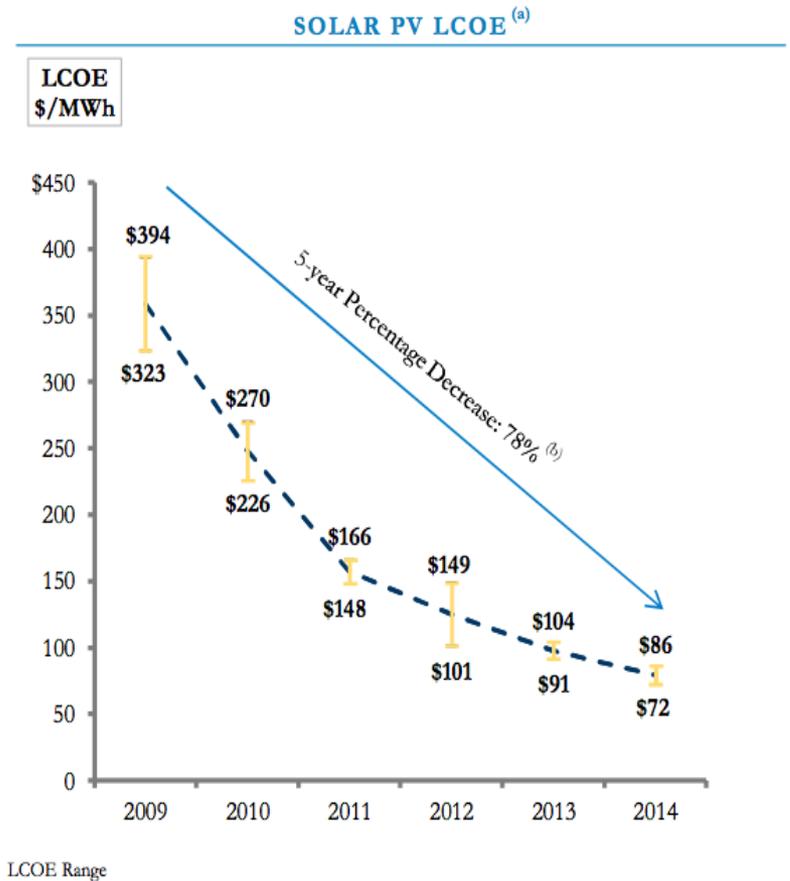


Quellen: BP, IRENA

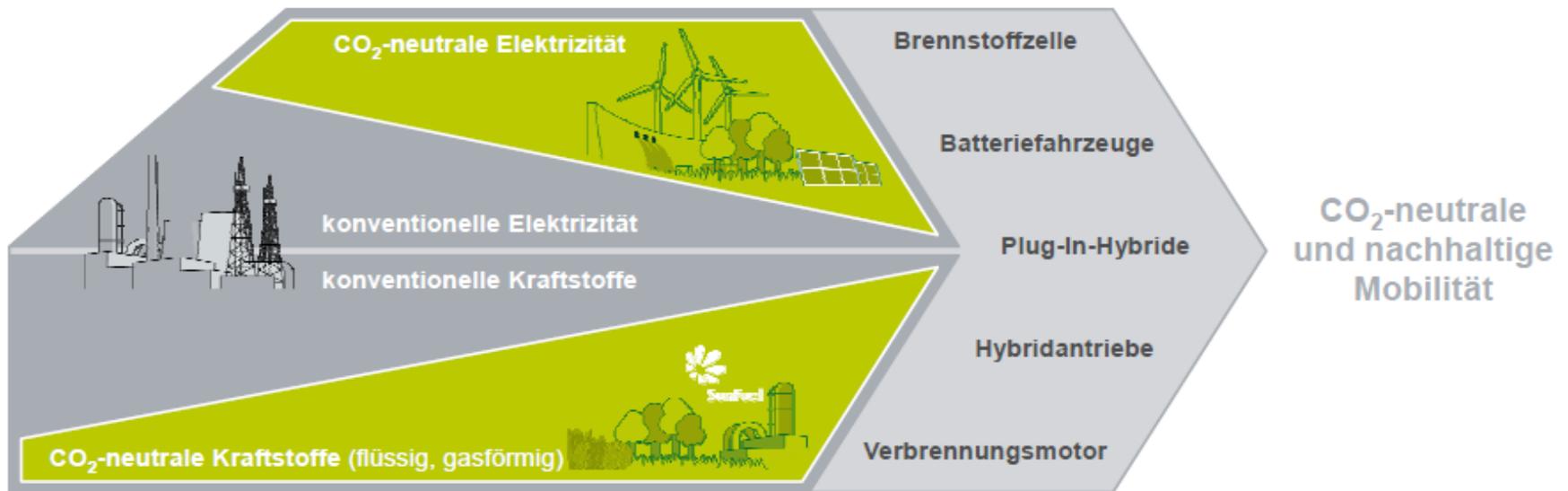
It's the Economy, Stupid! Cost Degression Wind & Solar (US)



Source: Lazard estimates.



Sustainable Mobility: Replacing Fossil Fuels by Renewable Energy



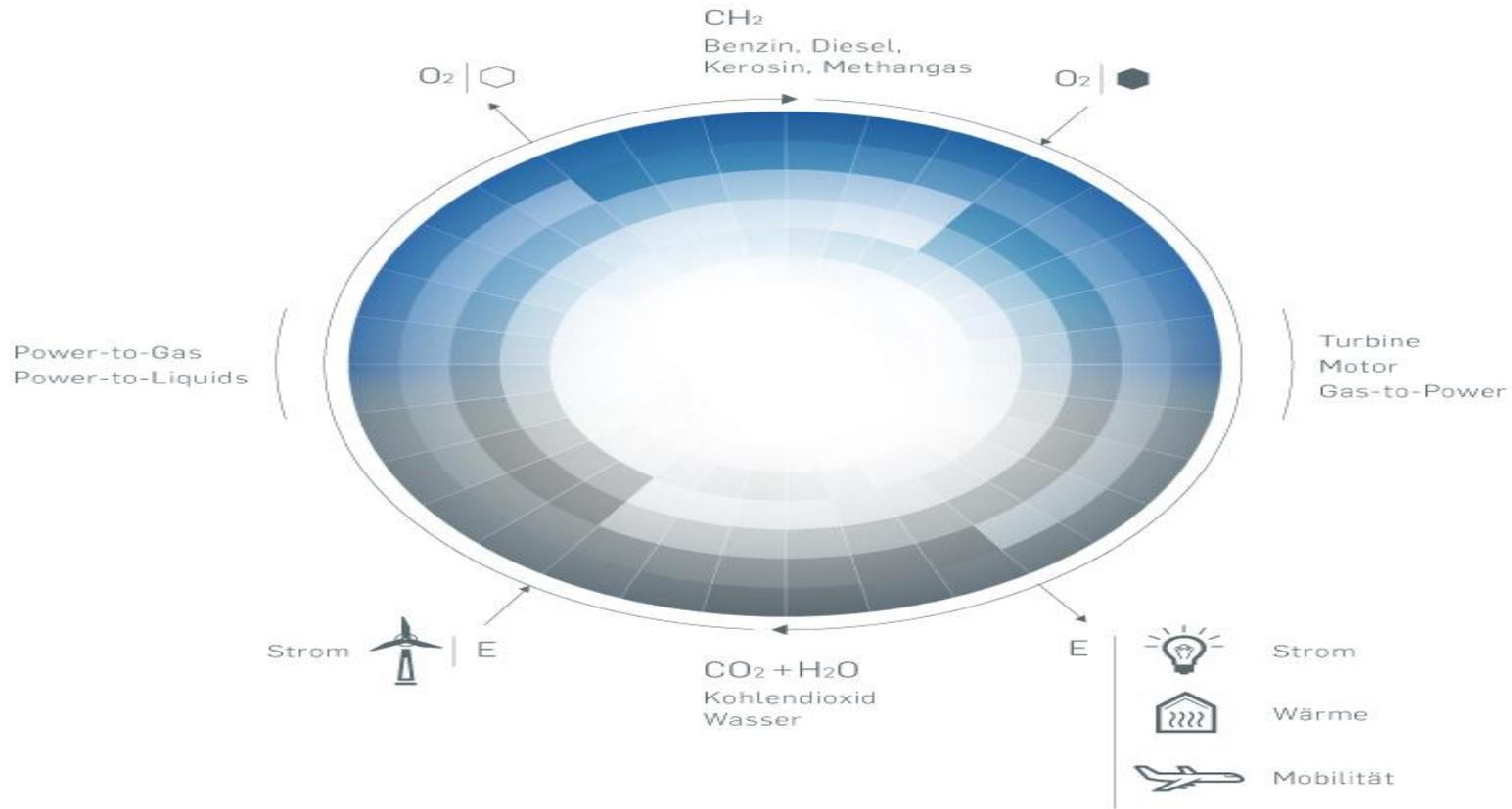
Green Buildings

Fossil Free: Algae + Geothermal + Photovoltaics

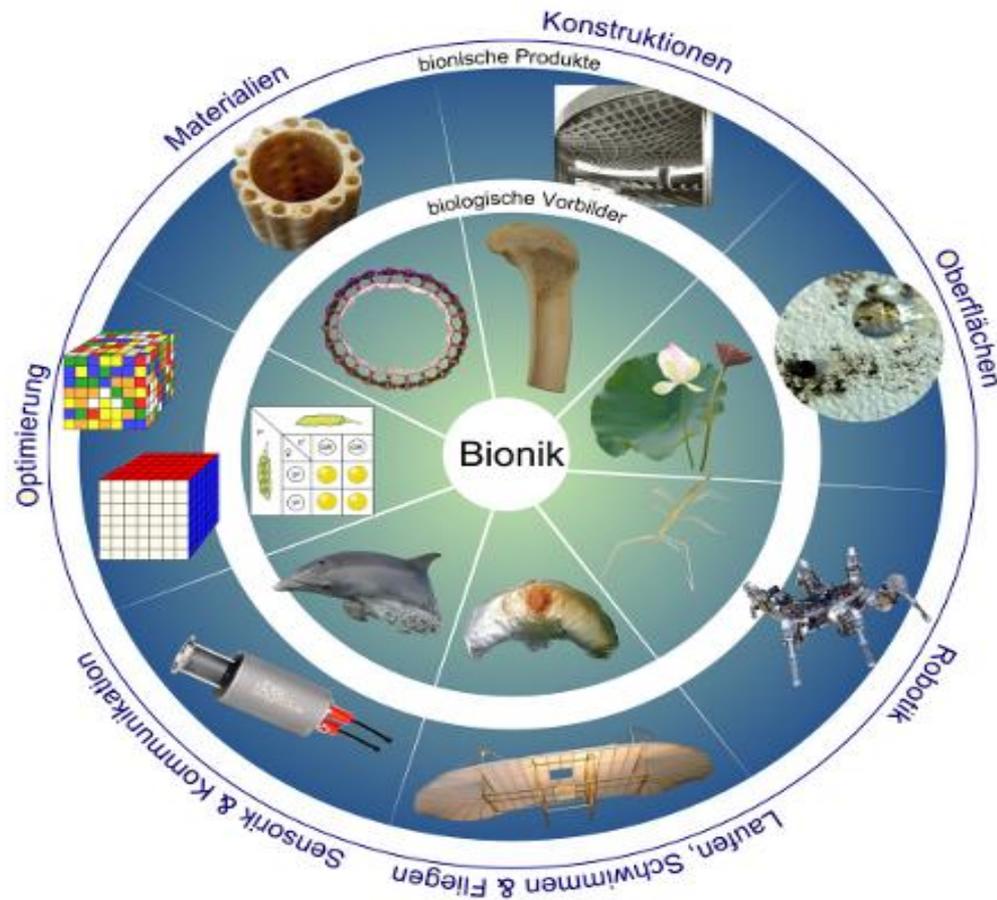


Leapfrogging into the Solar Age

Technical Photosynthesis



BIONIK: Lernen von der Natur

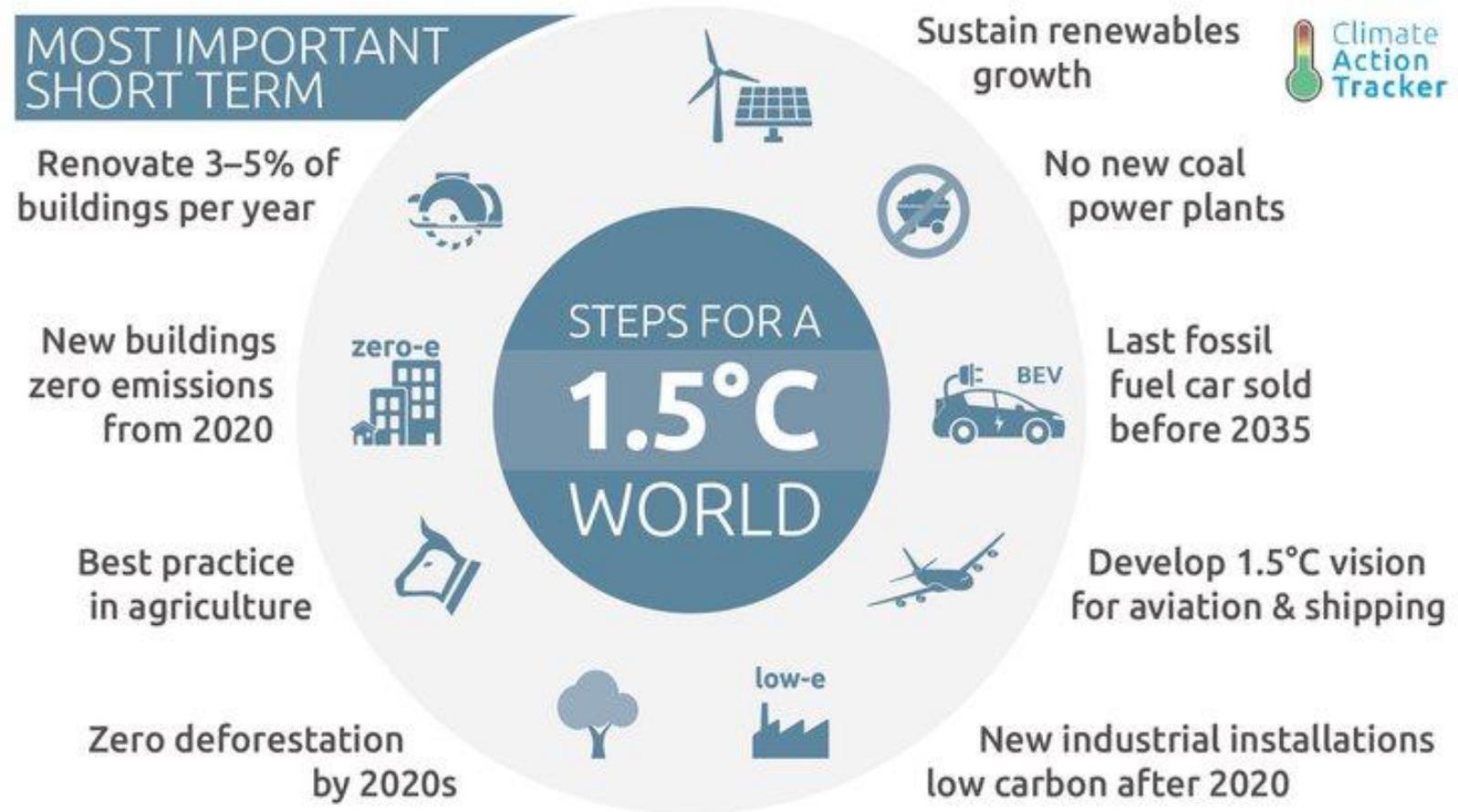


Investing in the Future / Green New Deal



- **Moving towards zero carbon requires high investments (R&D, energy system, public transport, urban development, green technologies)**
- **Higher investment-rates will stimulate a new cycle of Green Growth**
- **Inclusive Growth: Investing in people (education, vocational training, health care)**

Action Plan For A 1.5* C World



Values matter! – Cultural Change

Trends towards a value-based economy:

- **Fair Trade**
- **Introducing social and environmental standards along the value chain**
- **Sustainability certificates (FSC etc)**
- **Changing lifestyles: Mobility, eating, less is more**
- **Sharing economy (car pooling, online exchange)**

Change Agents

Policy matters!

- > Governance of the commons (atmosphere, oceans etc)
- > Environmental standards
- > Cap & Trade (ETS)
- > Green Tax Reform
- > Public procurement

Civil Society

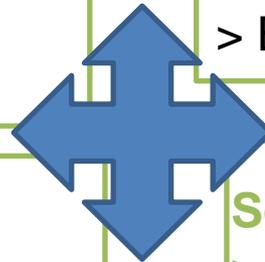
- > NGO's
- > Consumer Power (demand side)
- > Lifestyle change
- > Bottom-up Innovation

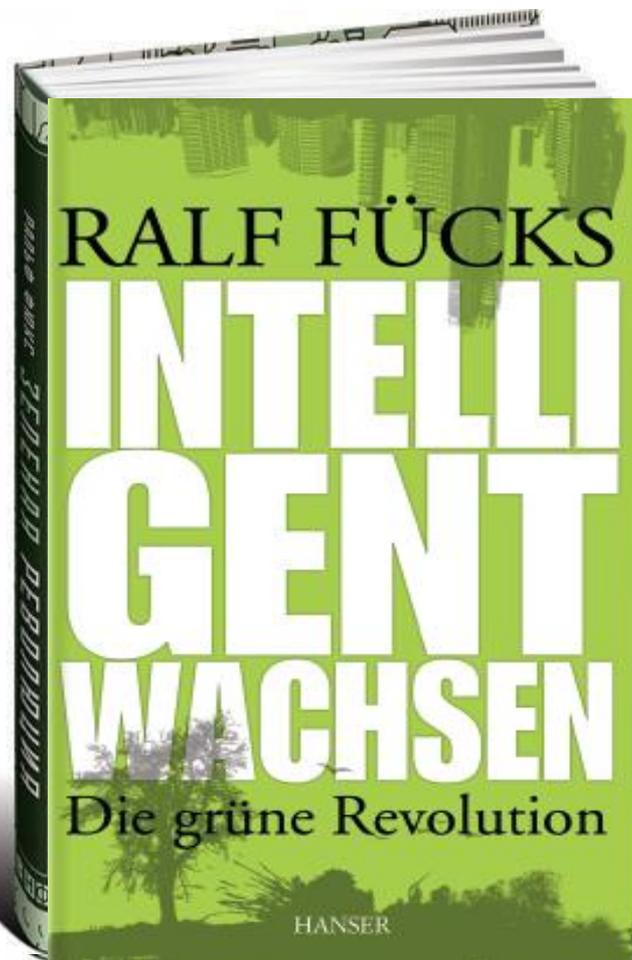
Business

- > Main driver of innovation
- > Fostering entrepreneurship
- > Green Finance
- > CSR, Environmental Management Systems, Green Certificates

Science (R & D)

- > Science-based innovation
- > Cross-Sector Innovation: Biotechnology, Green Chemistry, Material Science, IT





GREEN GROWTH SMART GROWTH

A New Approach to Economics,
Innovation and the Environment

FOREWORD BY ANTHONY GIDDENS



RALF FÜCKS

