

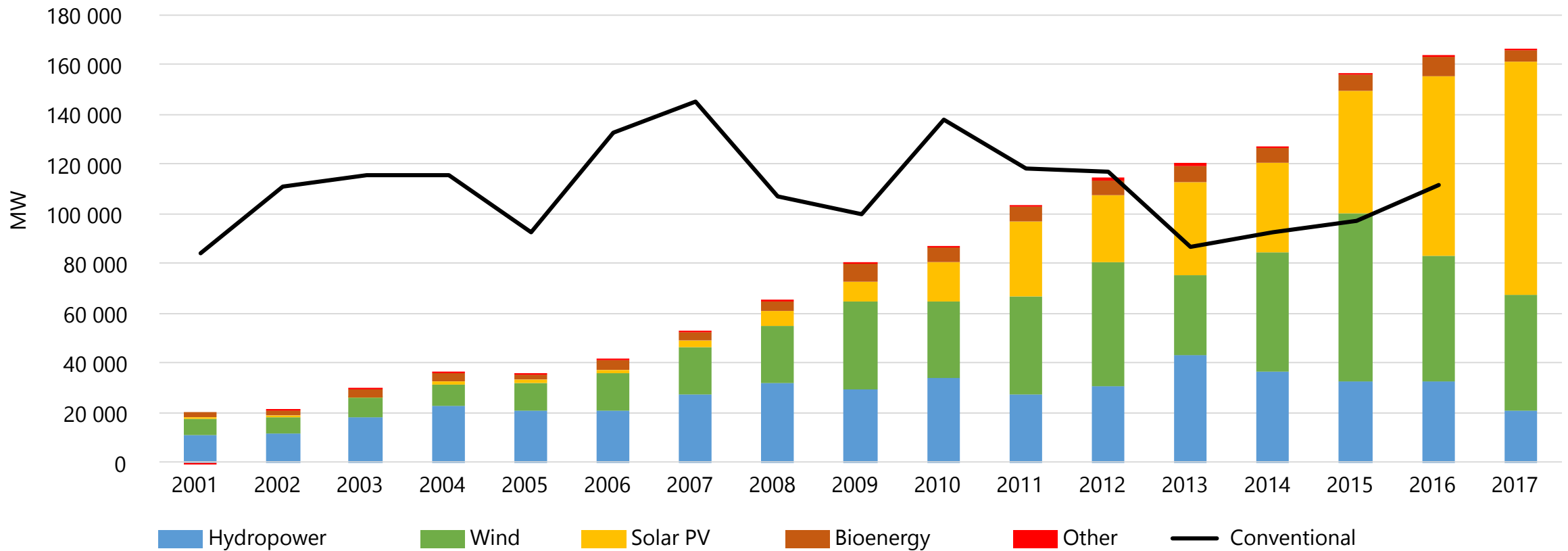


Overview of Global and Regional Renewable Energy Policy Landscape

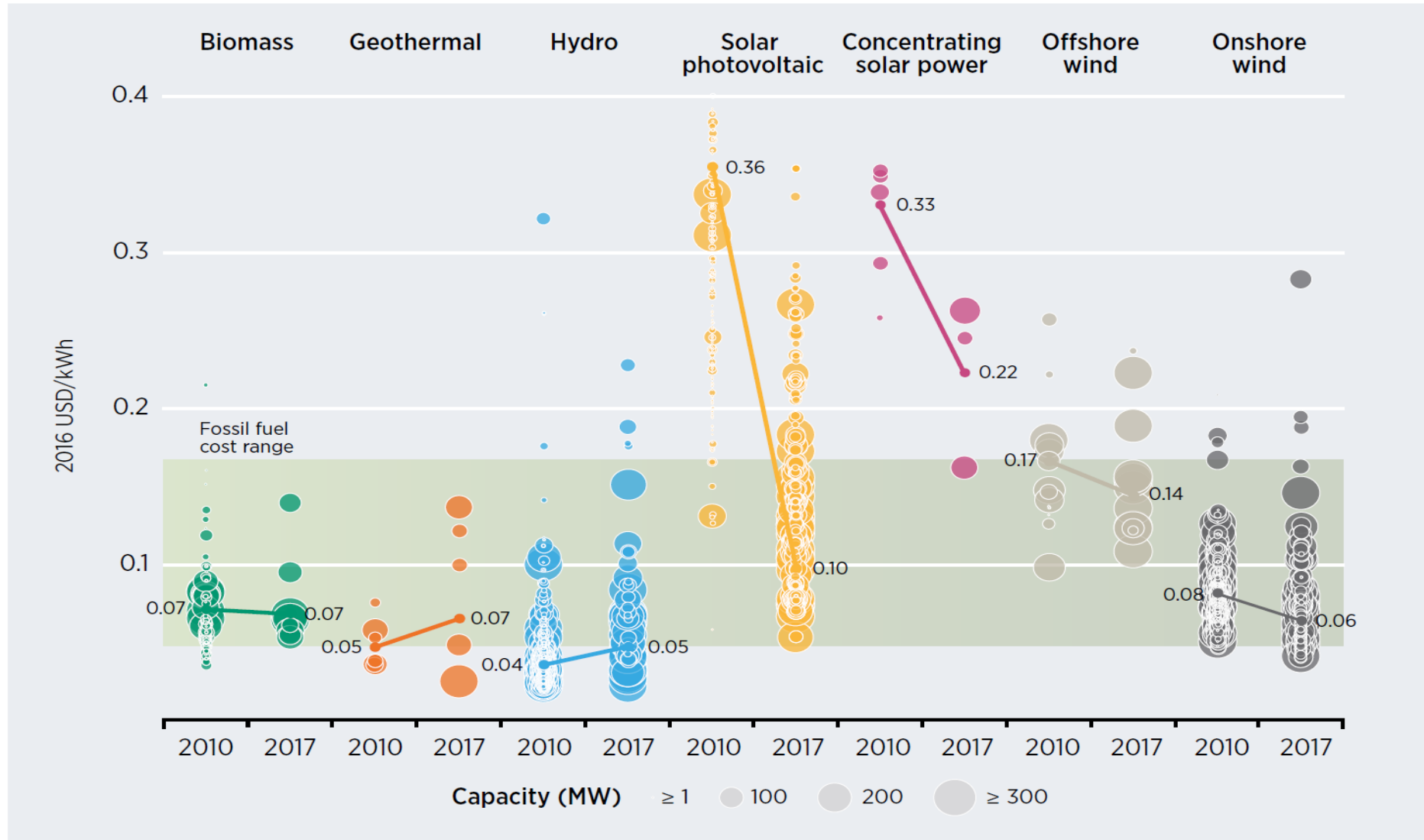
Da Nang, May 2019

The energy transition

Global capacity addition, 2001-2017

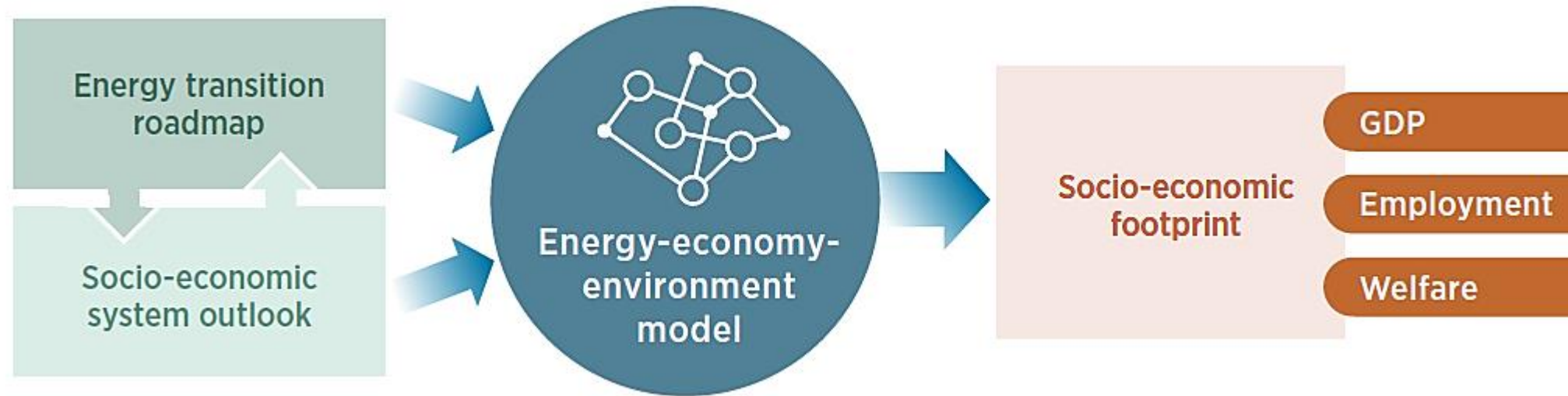


Recent cost evolution



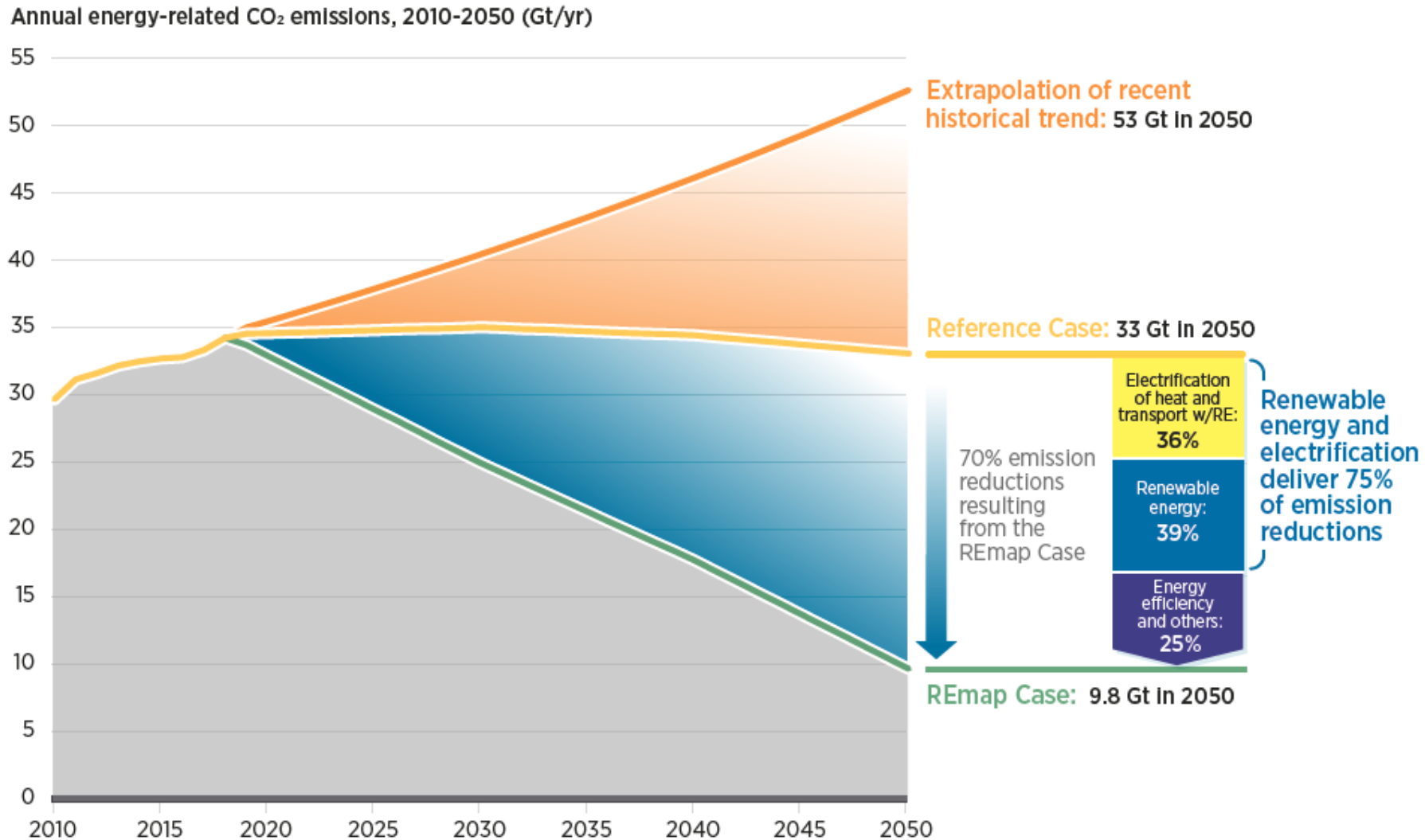
Source: IRENA Renewable Cost Database.

The socio-economic footprint of the energy transition

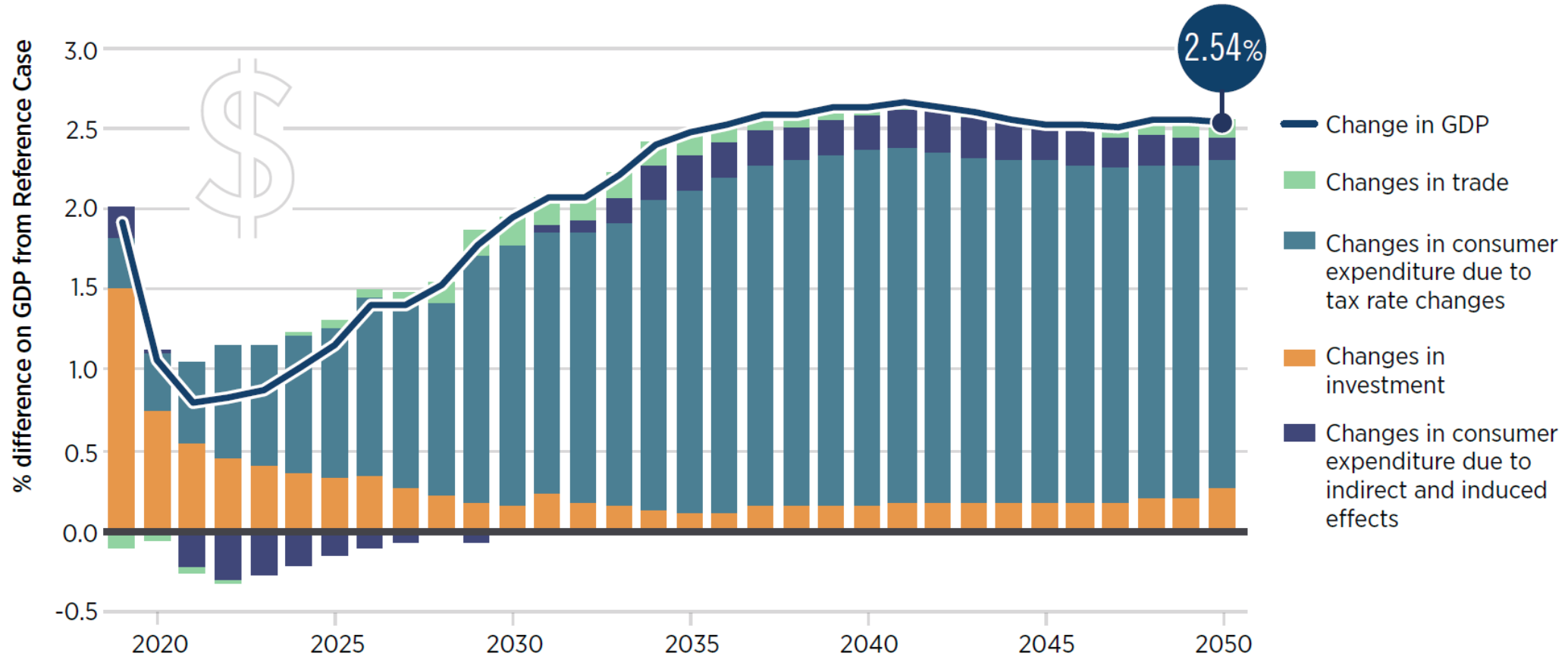


- Unlocking the potential of the energy transition requires fostering synergies between the energy and socio-economic systems.
- IRENA models evaluate the socio-economic footprint resulting from the multiple interactions between energy transition roadmap and socio-economic outlook.

Renewables & electrification can deliver 75% of energy-related CO₂ emission reductions needed

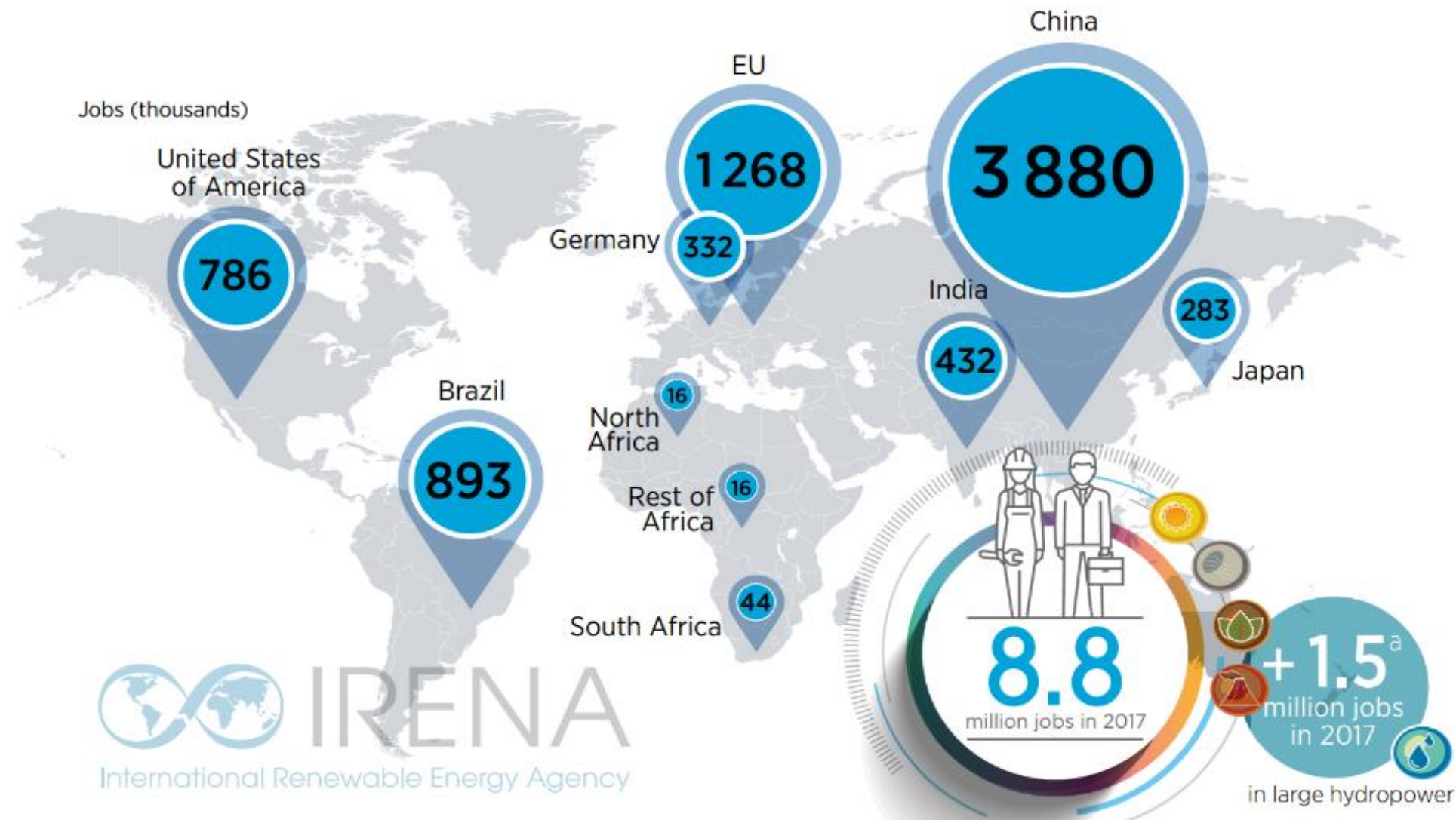


The energy transformation boosts global GDP



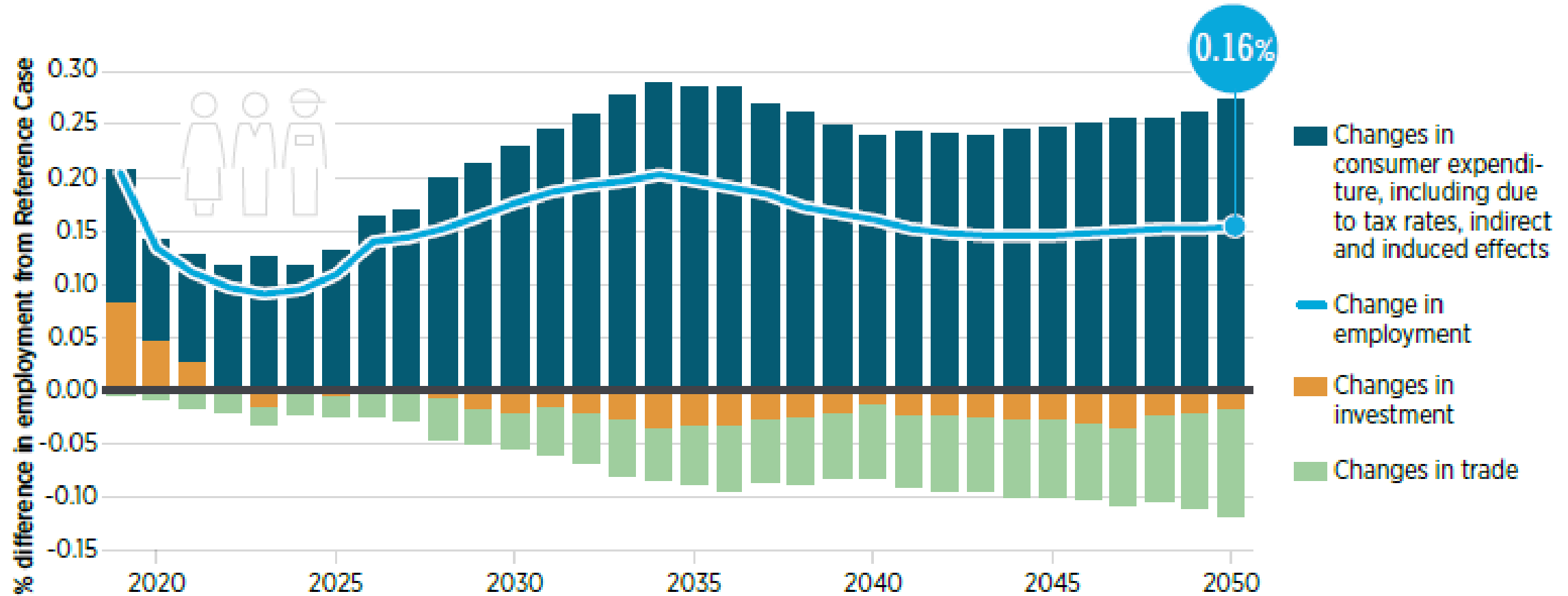
The REmap Case boosts global GDP by 2.5% in 2050, with a cumulative gain of USD 99 trillion from 2019 until 2050.

Renewable energy employment across the globe



Renewable energy employment per region

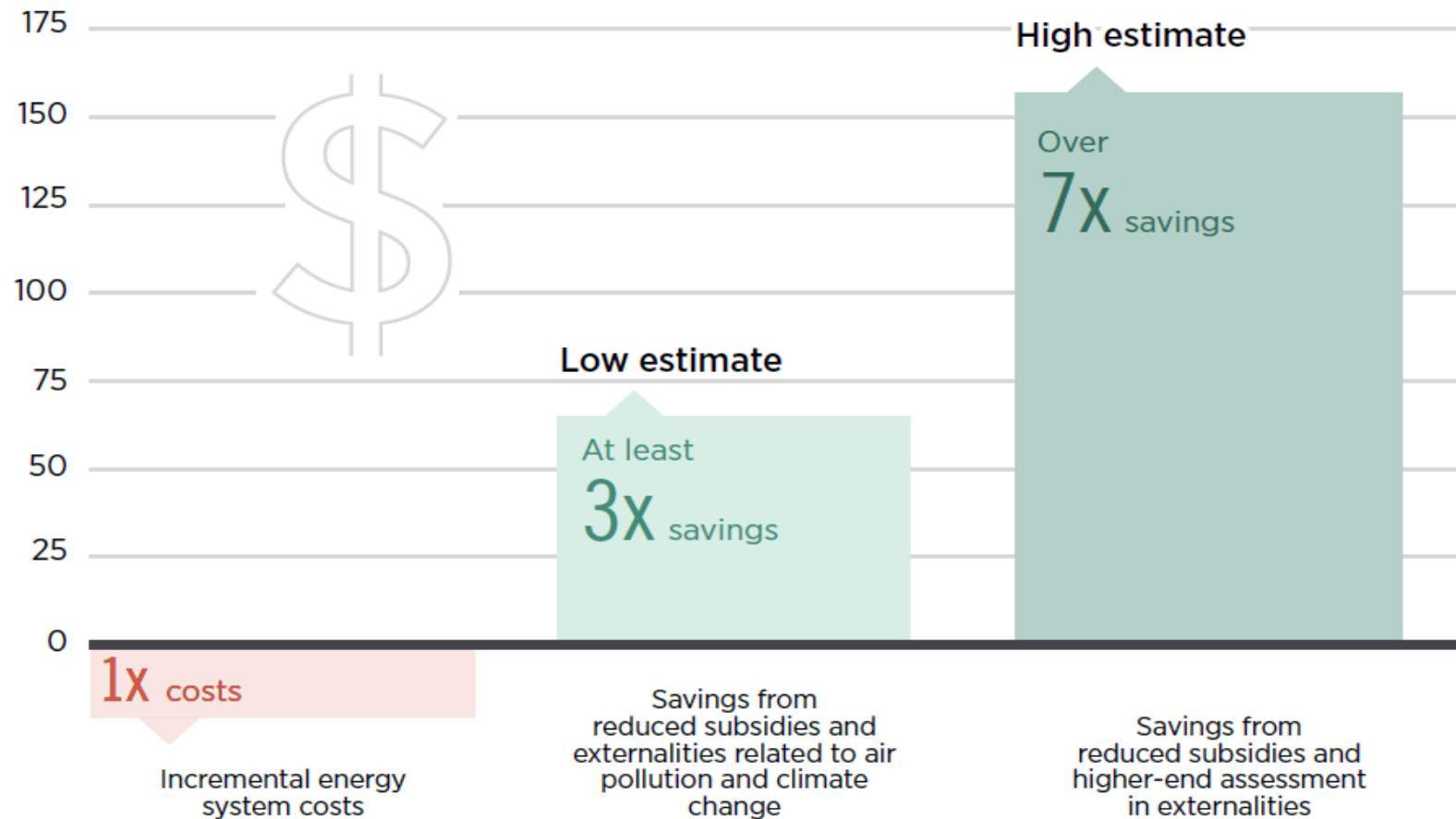
Economy-wide employment witnesses growth



Seven million new jobs are created in the REmap Case. Jobs are lost in fossil fuels and other sectors of the economy: actions to ensure a just transition are needed to address this.

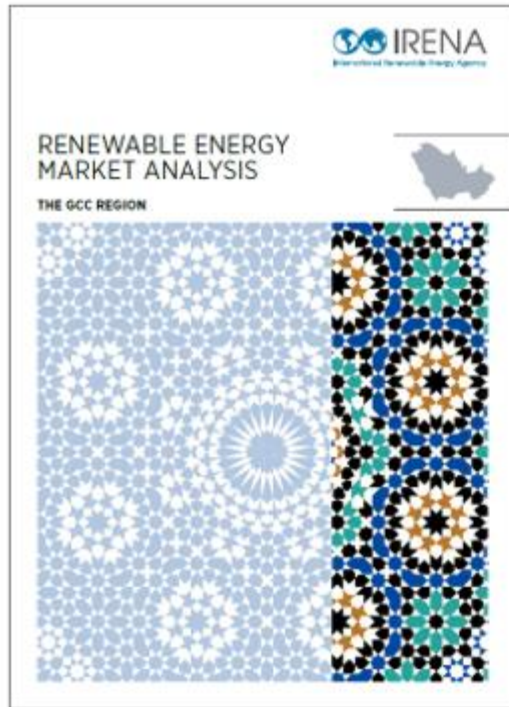
Every dollar invested in the global energy transformation saves 3-7USD

Costs and savings for the period 2016-2050 for the REmap Case, compared to the Reference Case (USD trillion)

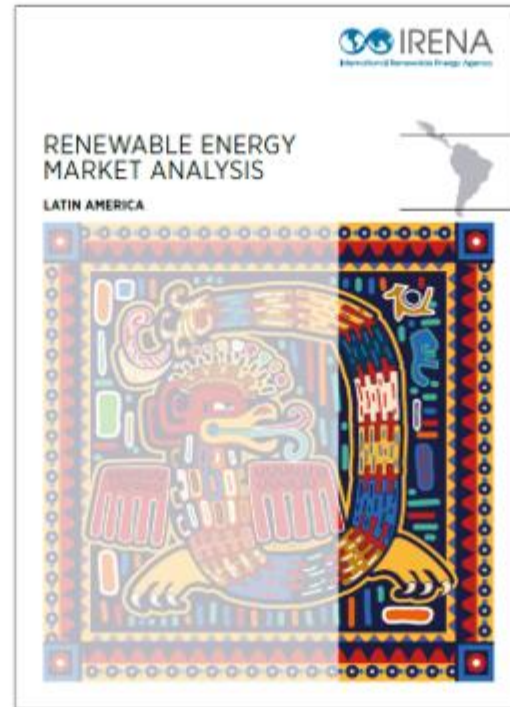


Total net benefits amount to USD 45 - 140 trillion over the period to 2050.

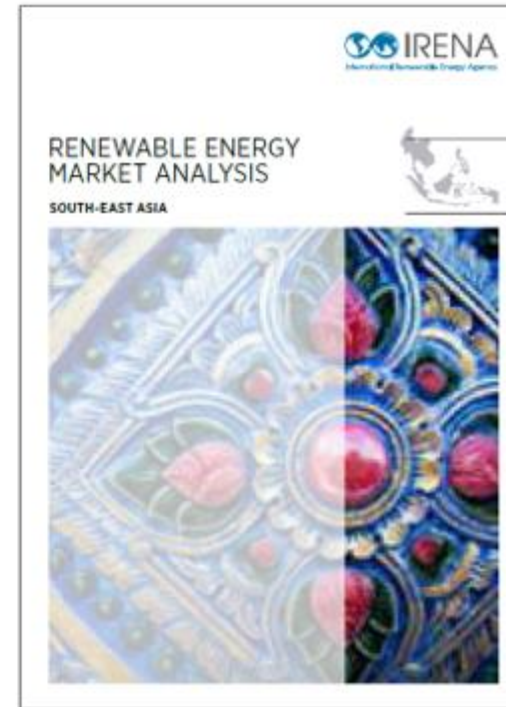
IRENA Renewable Energy Market Analysis Series



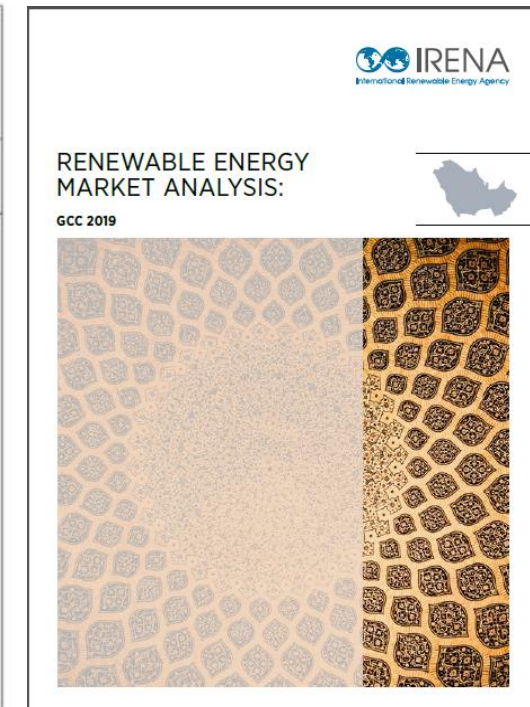
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Energy sector
overview

RE landscape

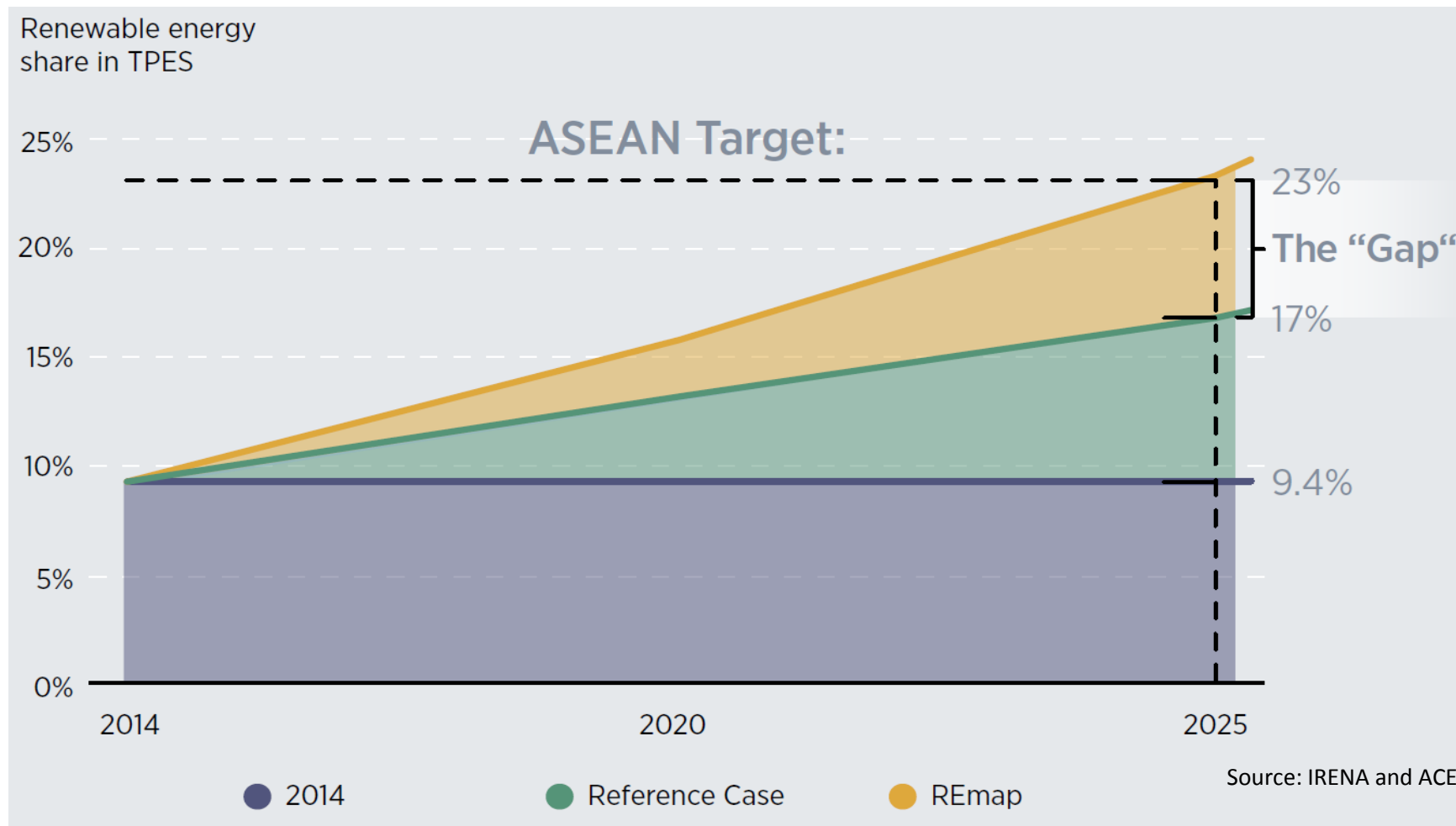
Policy
framework

Investment
framework

In-focus
discussion

The way
forward

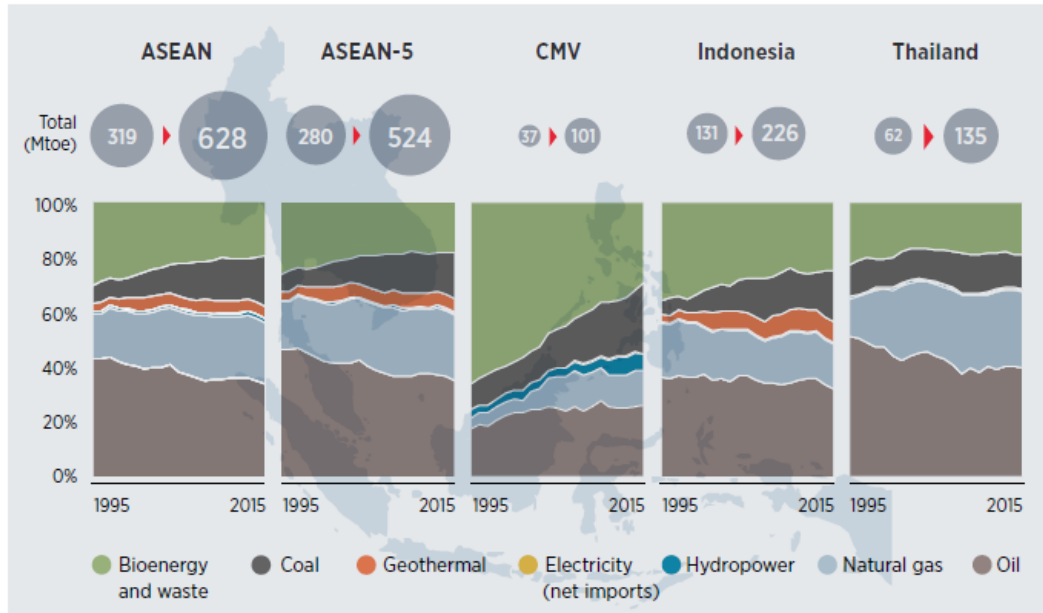
The gap between deployment and target



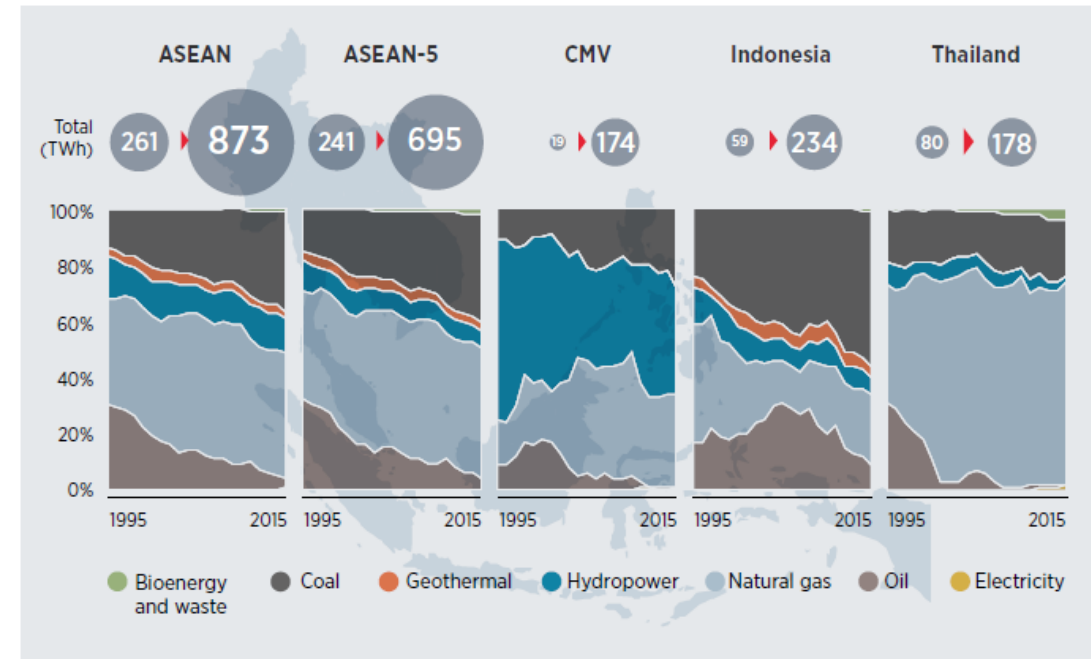
Based on current plans and policies, the share of renewables in TPES would increase to just under 17% by 2025

Drivers for diversification of the energy mix in Southeast Asia - Environment

Total primary energy supply by energy source, 1995-2015



Electricity generation by energy source, 1995-2015



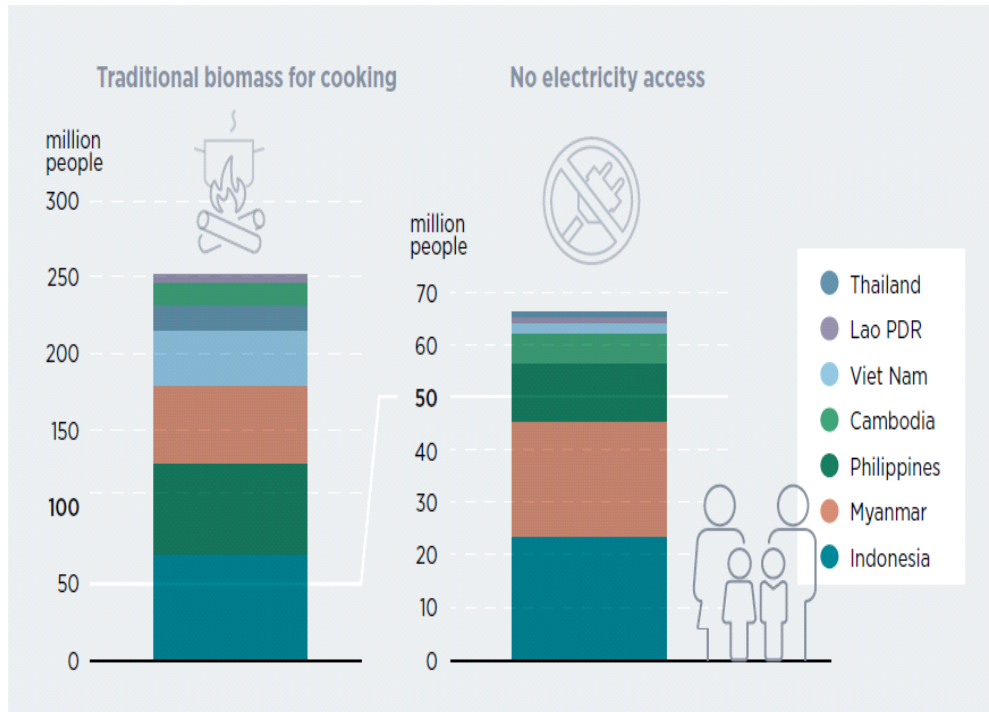
Human health and environmental Degradation

- **Emissions** from energy could rise by **61%** in the region by 2025, driven mainly by coal-fired electricity production followed by the industry and transport sectors.
- ASEAN Member States have made commitments to reduce their emissions as part of COP 21 climate process
- Need to improve air quality

Drivers for diversification of the energy mix in Southeast Asia – Socio-economic benefits

Energy access

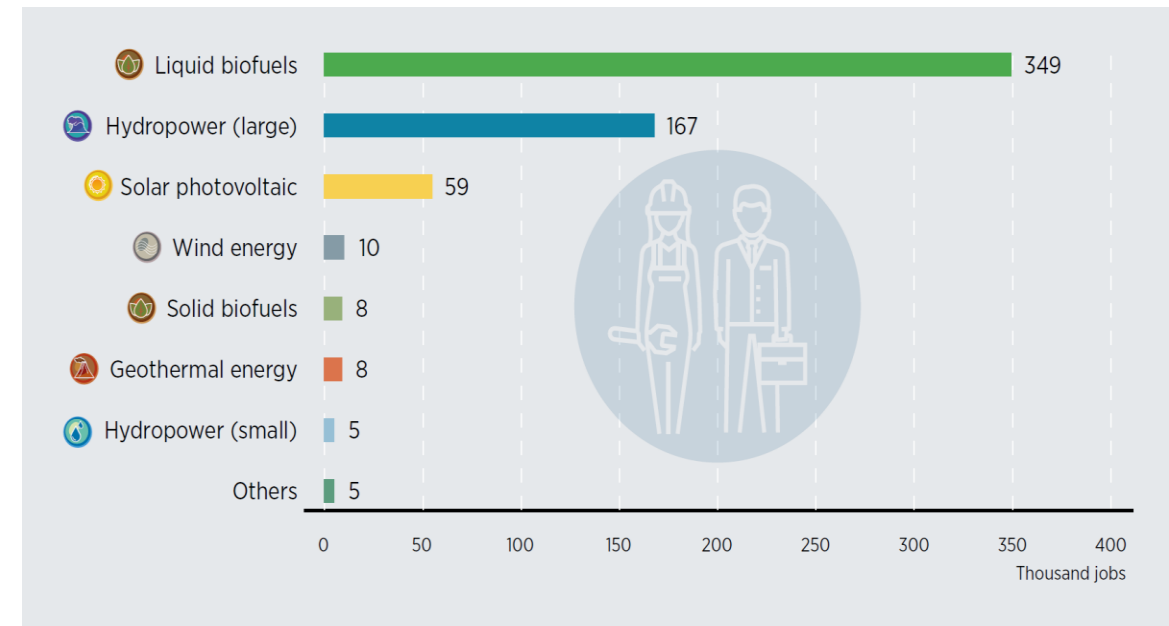
Number of people using traditional biomass for cooking and without access to electricity, 2016



Source: Based on IEA, n.d.

Additional Jobs

Renewable energy jobs estimated at 611 000 in 2016



- Scaling-up renewables would have a positive impact on the region's GDP (up to **+0.03% by 2030**)
- Could increase direct and indirect employment in the sector to **2.2 million by 2030**

Bridging the gap through enabling policy and investment frameworks

Between 2006 and 2016, over USD 27 billion has been invested in the (non-large hydro) renewable power sector.



Investments in solar PV in selected countries driven by feed-in tariff policy, 2007-2017

- Most countries have introduced feed-in tariffs. Also new mechanisms such as the auctions.
- Adaptations need to be well-managed to minimise uncertainty.
- USD 27 billion needed annually to reach the 23% target, much in end-use sectors.
- Focus on project readiness, access to capital at the local level, and investment risk mitigation.

Source: Based on BNEF investment data

