

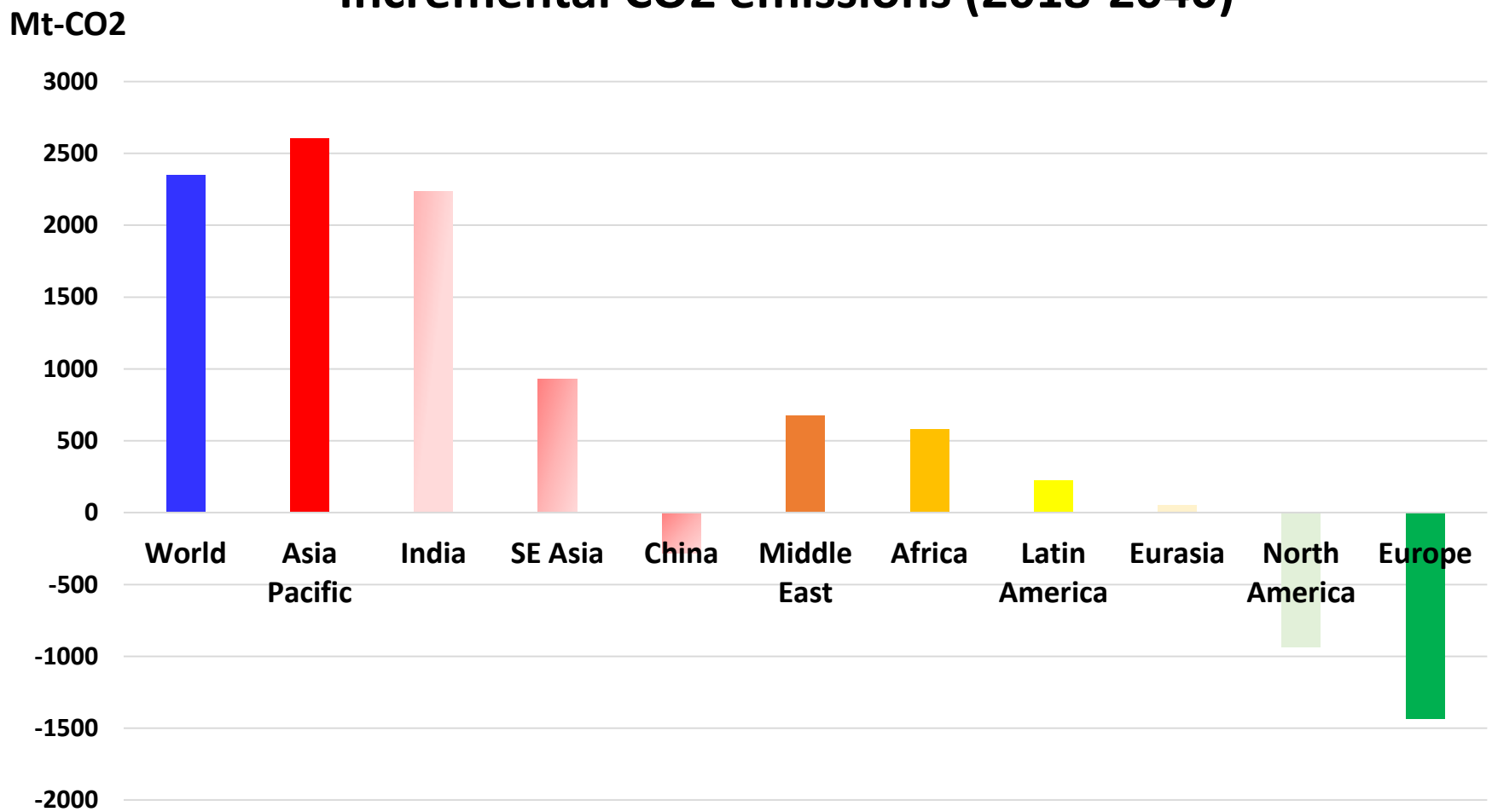
# **Connecting IPCC/COP and the Asian energy reality**

**9 Dec 2019  
Jun ARIMA**

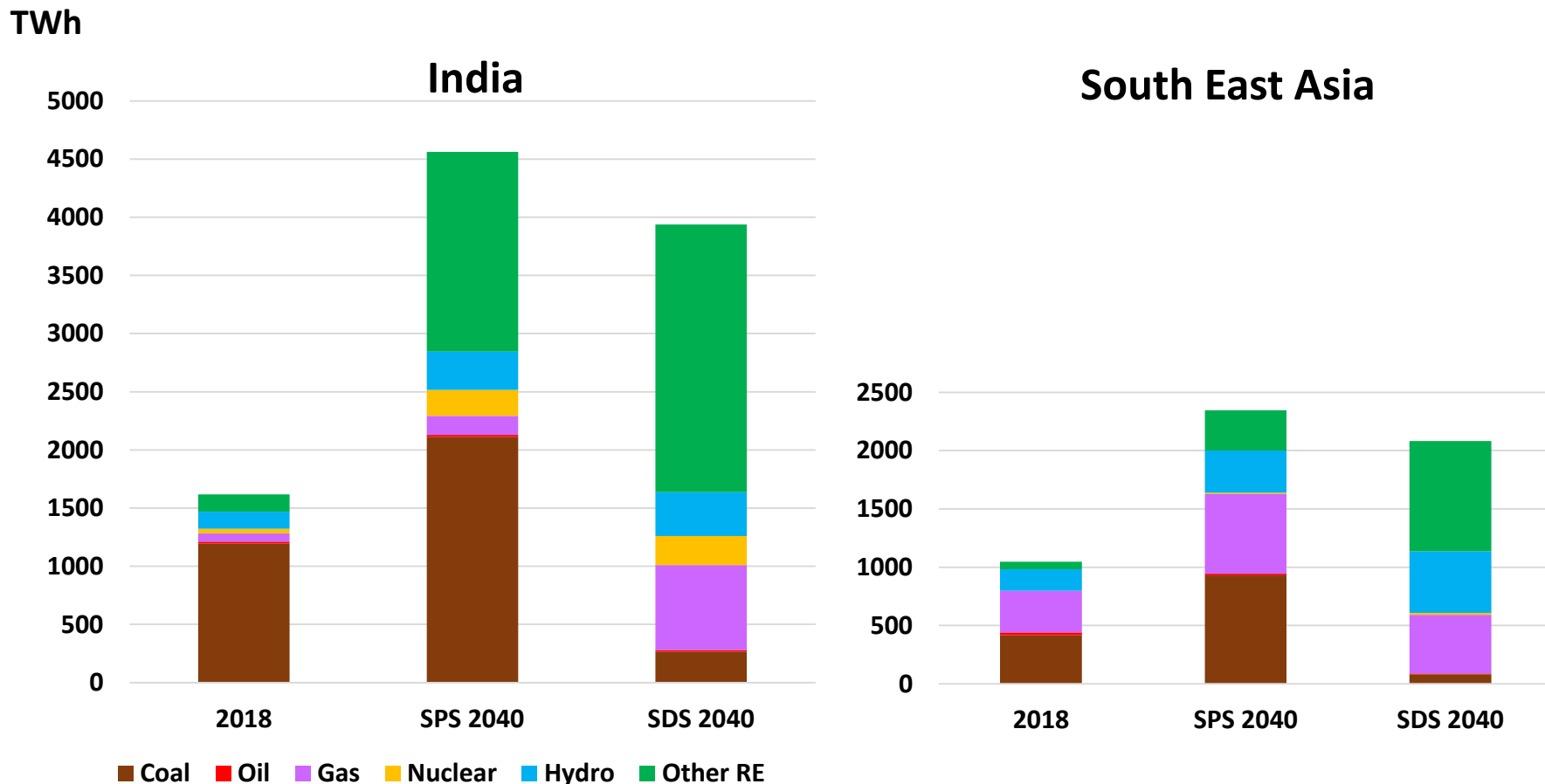
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**■ The bulk of incremental global CO2 emissions comes from Asia Pacific region driven by India and SE Asia**

**Incremental CO2 emissions (2018-2040)**

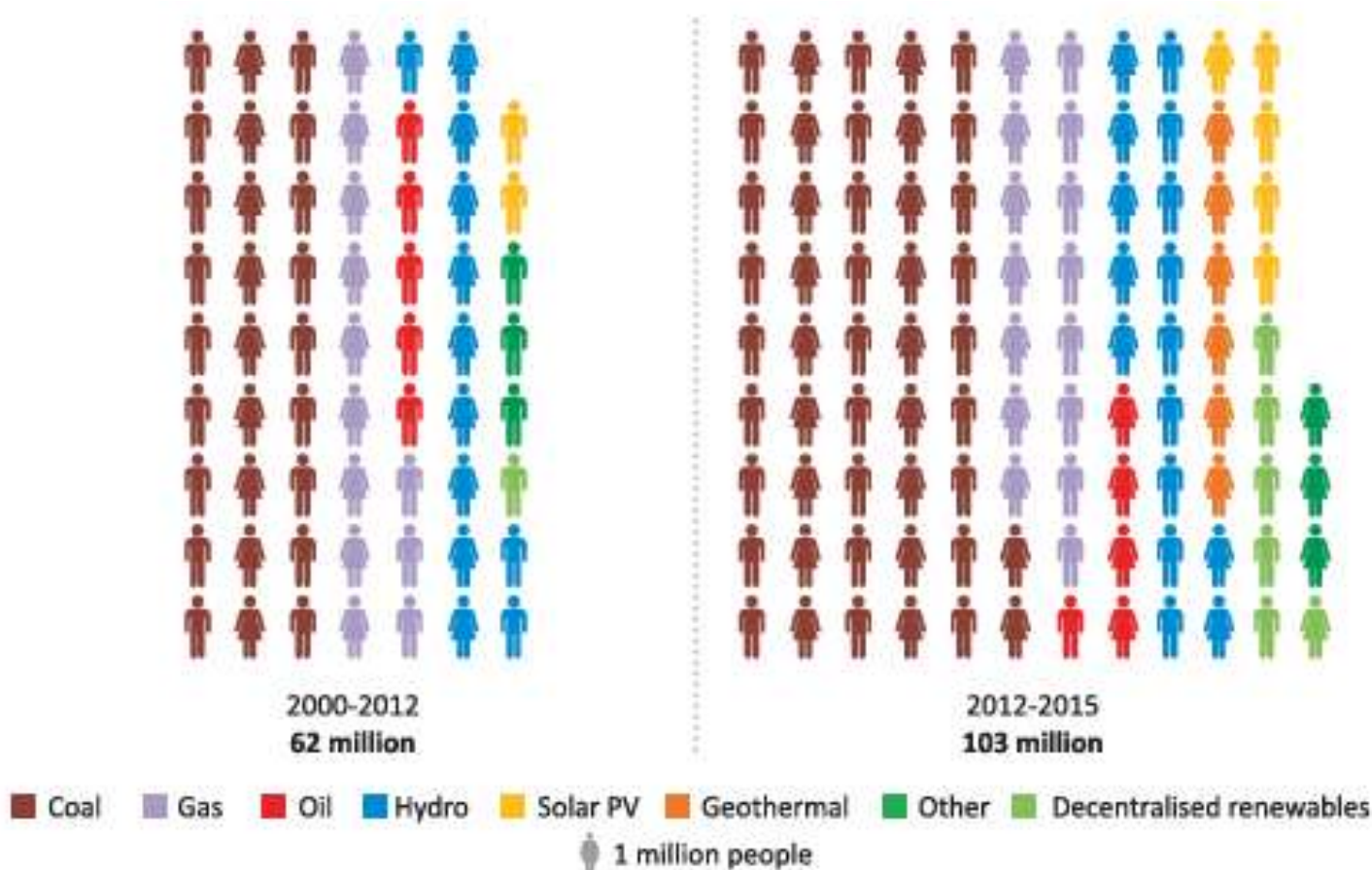


**■ In the Paris compatible scenario, India and South East Asia needs substantial reduction of coal power generation and substantial increase of RE power**



- From 2000 to 2015, out of 1.2 billion people who gained access to electricity, 880 million people did so by fossil fuel power (540 million by coal).

Annual number of people gaining electricity access by fuel type in developing countries



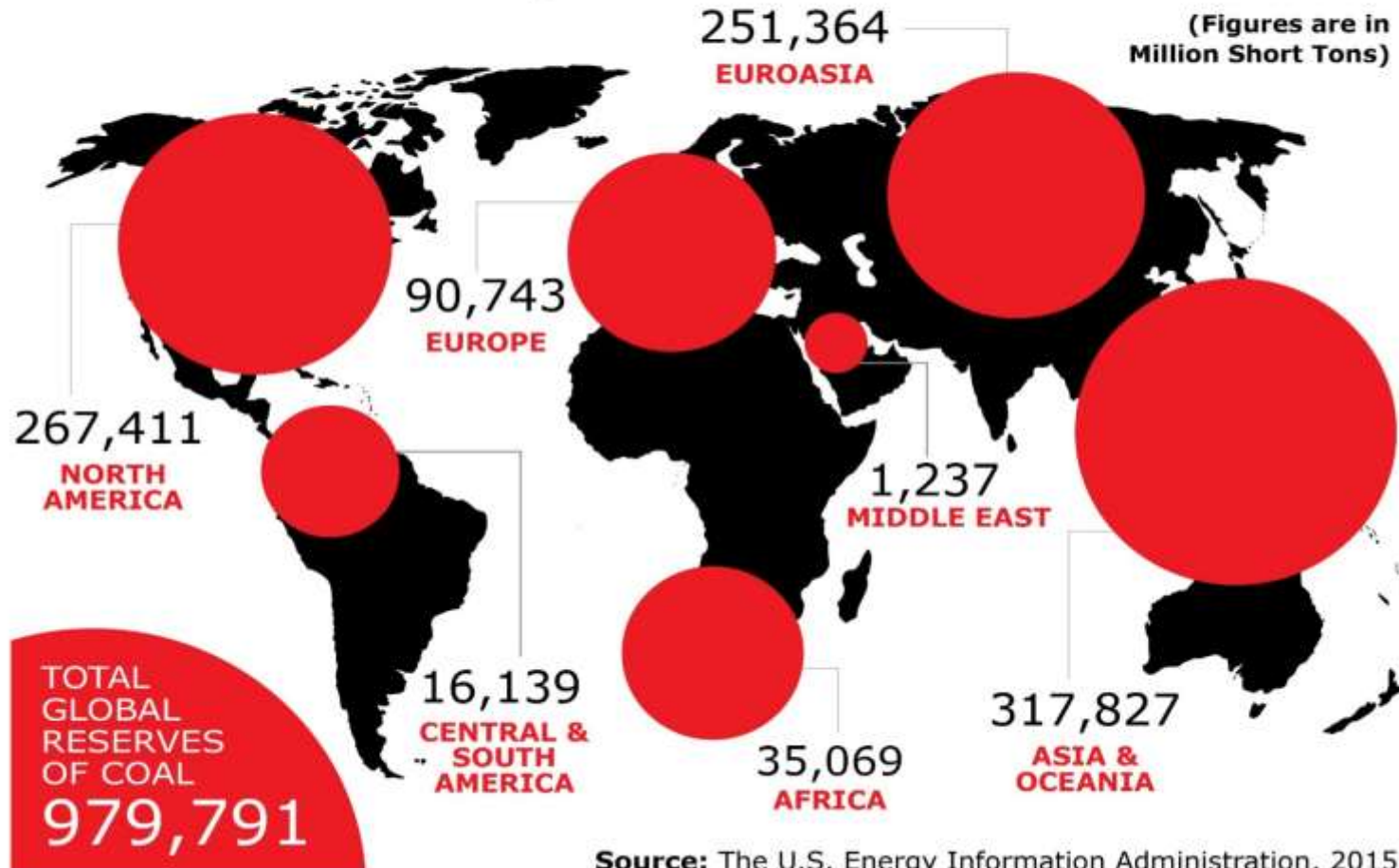
■ Coal is the most abundant energy resource in Asia

### WORLD COAL RESERVES BY REGION

Coal reserves are available in almost every country. The biggest reserves are in the Asia & Oceania region.

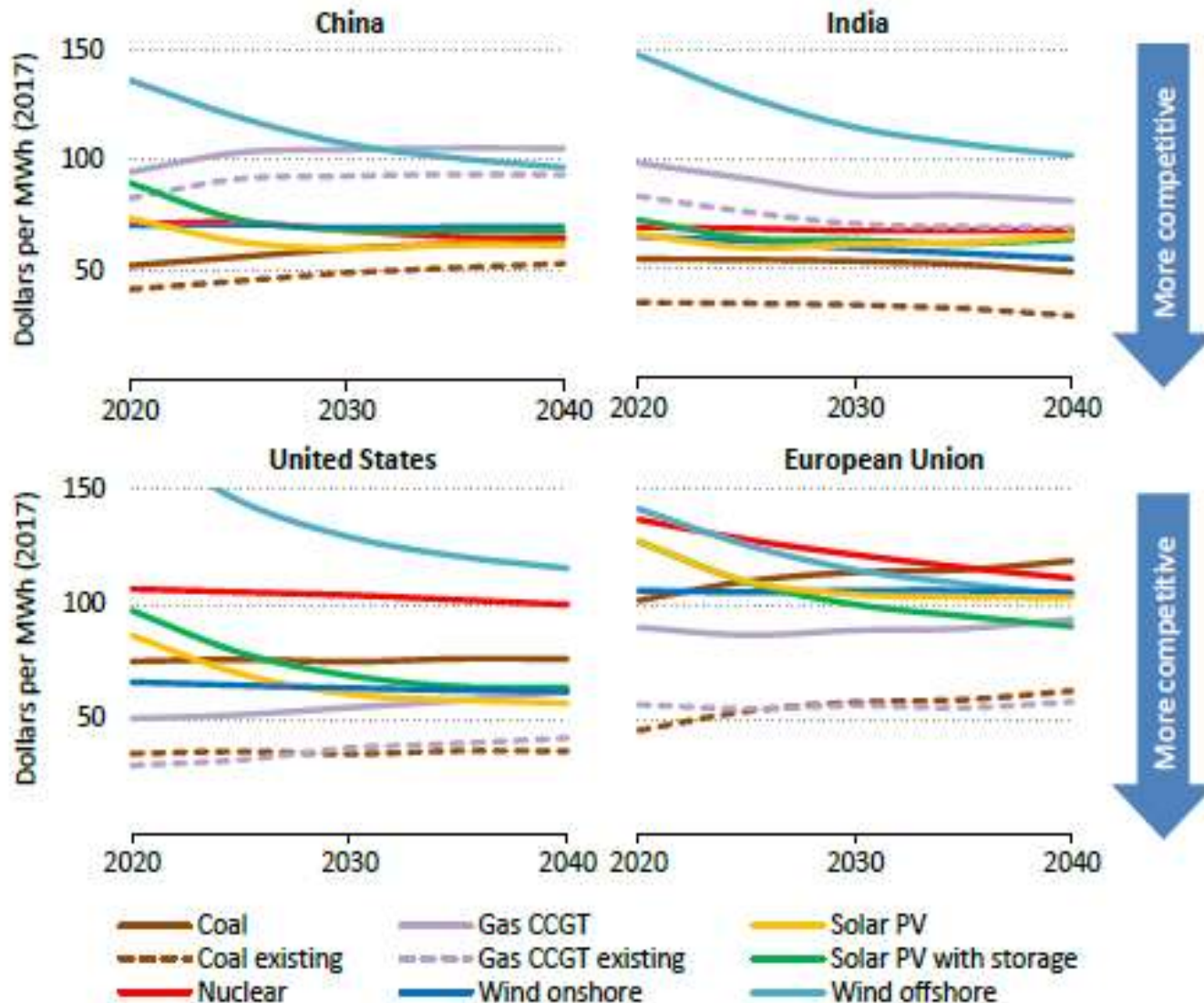


(Figures are in Million Short Tons)



Source: The U.S. Energy Information Administration, 2015

- Competitiveness of power sources differs across countries
- Coal will continue to be the cheapest in India



- Raising energy prices is very unpopular policy.
- 135-5,500 \$/t-CO<sub>2</sub> of global carbon tax (IPCC SR 1.5) ↔ →  
Yellow vest against carbon tax hike of 10 EUR/t-CO<sub>2</sub>
- Even less “willingness to pay” in developing Asia

Un-discounted 2010 US Dollars

Carbon Tax per Metric Ton of CO<sub>2</sub>

	2°C Pathway Low	2°C Pathway High	1.5°C Pathway Low	1.5°C Pathway High
2030	\$10	\$200	\$135	\$5,500
2050	\$45	\$960	\$245	\$13,000
2070	\$120	\$1,000	\$420	\$17,500
2100	\$160	\$2,125	\$690	\$27,000

**LES ÉLITES PARLENT DE LA FIN DU MONDE, NOUS ON PARLE DE LA FIN DU MOIS**

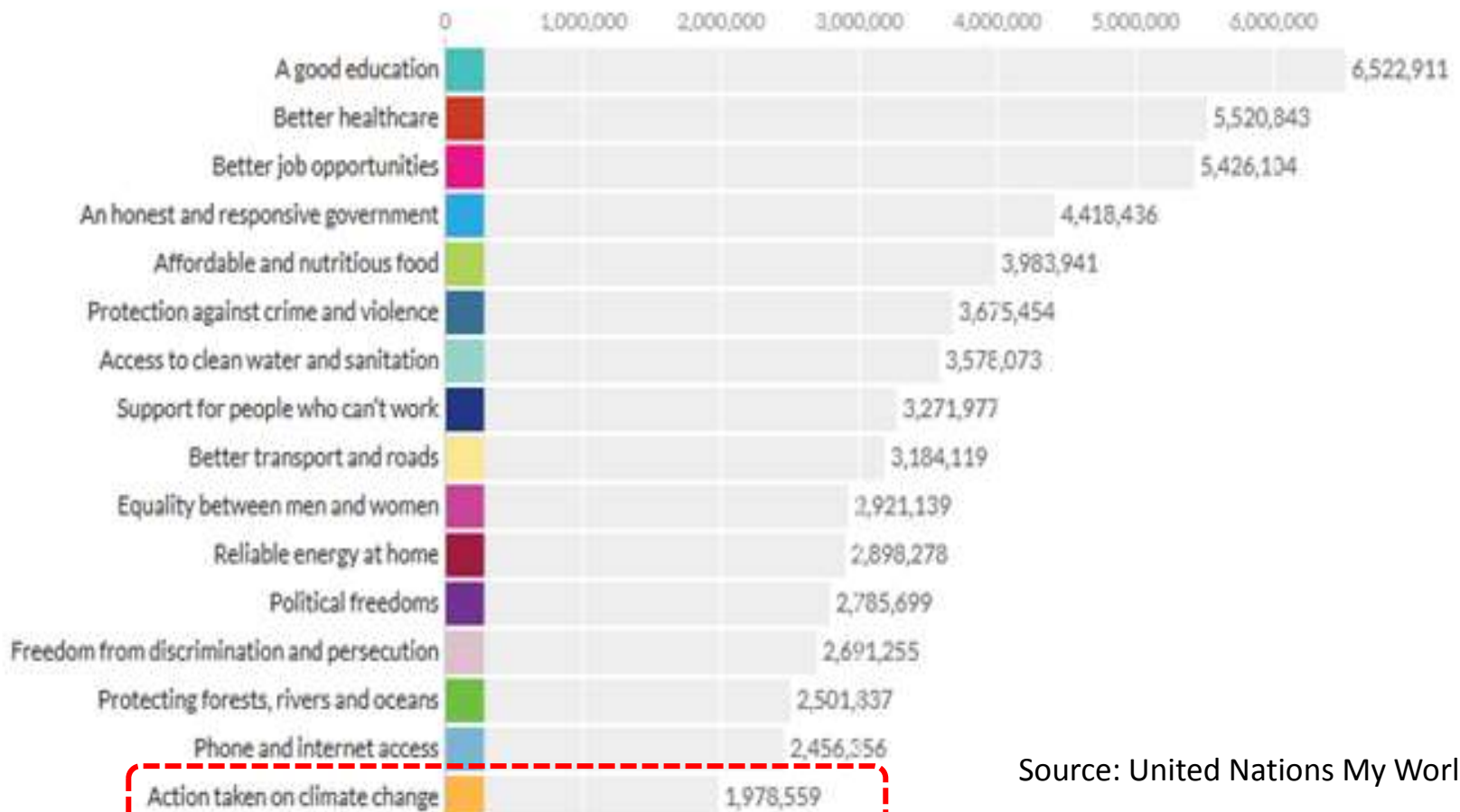


Source: IPCC Special Report on Impacts of Global Warming of 1.5 degree above Pre Industrial Levels

Source: Le Figaro

- UN global poll engaging 9.7 million people (HDI low countries 44%, medium countries 27%) indicates highest priority on education, healthcare and job opportunities while climate change comes at the bottom.

9,729,028 votes for All Countries & Country Groups / All Genders / All Education Levels / Age Group (All Age Groups)



Source: United Nations My World 2015



## EAS countries' energy narrative ↔ COP/IPCC narrative

The EAS Ministers discussed the work plans being implemented under the EAS cooperation, including energy efficiency, renewable energy, natural gas, alternative and low emission technologies. The Ministers also acknowledged the **continued role of fossil fuels including natural gas and clean coal technologies** in the region in order to contribute to the region's economic growth, energy security and environment protection. To this end, the Ministers called for deeper cooperation and concrete efforts, **in mobilizing finance from a wide variety of sources, to take advantage of the broad range of energy resources and clean energy technologies** to achieve regional economic growth, energy security and sustainable ecosystems

- **Huge gap between COP/IPCC narrative and Asian energy reality**
  
- **Reality does not change with advocacy. Pragmatism should prevail acknowledging;**
  - ◆ **Competitiveness of energy resources differs across countries.**
  - ◆ **Priority among 17 SDGs differs across countries.**
  - ◆ **Raising energy prices is political taboo , particularly in developing countries**
  
- **Carbon neutrality is possible only when zero carbon technologies are deployed with affordable price → technology target (e.g. cost, performance) rather than GHG target and time table**