

THE AMBITION CALL

The Ambition Call provides country recommendations for immediate climate action in response to the UN Secretary-General's request for countries to:

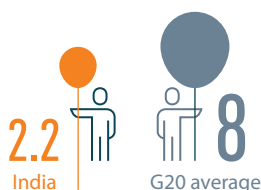
- present concrete, realistic plans that are compatible with the latest IPCC Special Report on global warming of 1.5°C
- enhance their NDCs by 2020 and
- reduce GHG emissions by 45% over the next decade, and to net zero by 2050.¹

The 2019 Summit in Osaka saw the G20 countries (with the exception of the USA) reaffirming their commitments to fully implement the Paris Agreement.² Many have already announced their willingness to increase their mitigation targets, aiming for net-zero emissions by 2050.

INDIA

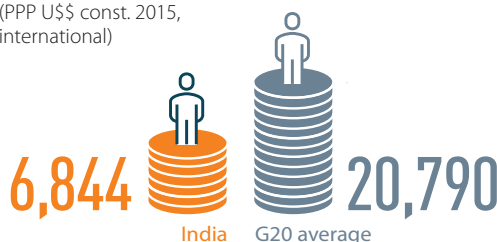


GREENHOUSE GAS (GHG) EMISSIONS
(INCL. FORESTRY) PER CAPITA
(tCO₂e/capita)



Data from 2015 | Source: PRIMAP 2018

GDP PER CAPITA
(PPP U\$S const. 2015,
international)



Source: World Bank 2017

HUMAN
DEVELOPMENT
INDEX



Data from 2017 | Source: UNDP 2018

RECOMMENDED ACTIONS

#1

Strengthen the 40%
non-fossil fuel target
of the NDC.

#2

Enhance the
emissions intensity
target of the NDC.

#3

Adopt a goal of 100%
sales of zero-emission
vehicles by 2035.



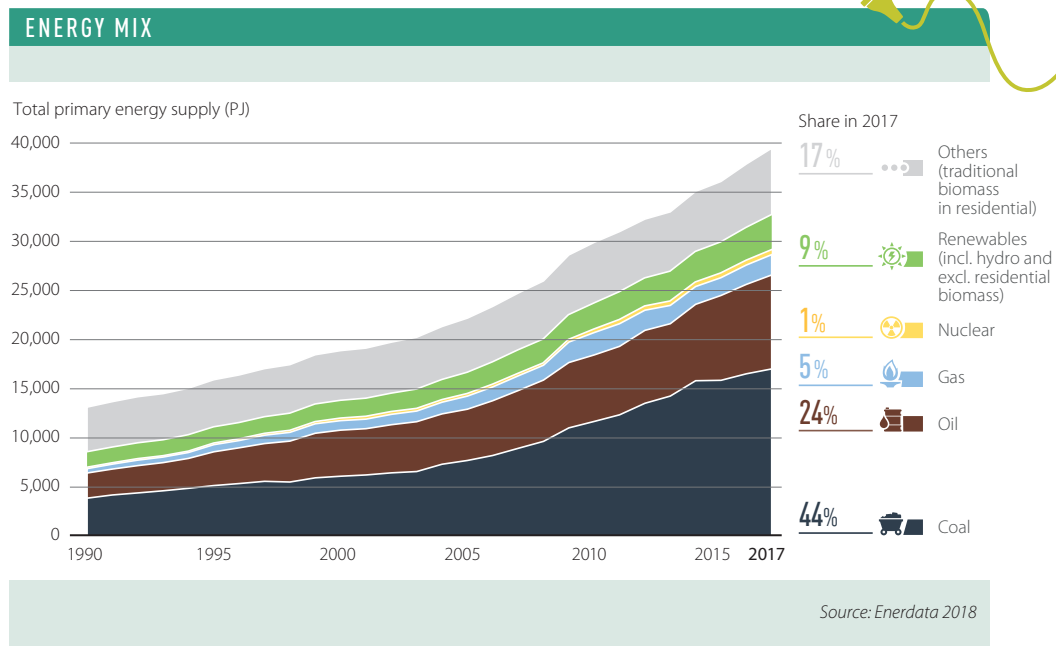
Climate Transparency is a global partnership with a shared mission to stimulate a 'race to the top' in G20 climate action and to shift investments towards zero carbon technologies through enhanced transparency. Climate Transparency is made possible through support from the Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU), through the International Climate Initiative, ClimateWorks Foundation and the World Bank Group.

<https://www.climate-transparency.org/>

Strengthen the 40% non-fossil fuel target of the NDC

#1

India's Nationally Determined Contribution (NDC) includes the target of 40% non-fossil fuel generation capacity in the power sector by 2030.³ Currently, this share is already at 35% and the government's own electricity plan would see it reach about 50% by the end of 2021-22 and 57% by 2026/2027.⁴ India will likely reach a share of non-fossil power generation capacity of 60–65% in 2030, corresponding to a 40–44% share of electricity generation.⁵ The country has had successful experience in bidding out renewable energy projects but should now consider a shift from a target expressed in terms of generation capacity to one expressed in terms of actual generation. This could be 35%–45% non-fossil fuel generation by 2030, equivalent to a target of 55–65% zero carbon generation capacity.



What does this mean?

The NDC would reflect the true decarbonisation potential of the country. Allowing and supporting renewable energy penetration avoids the risk of stranded assets in fossil fuel infrastructure and generates jobs in a more decentralised manner.⁶ Furthermore, the updated NDC target would give a clear sign of where India's energy

sector should go: away from fossil fuel dependency and towards sustainable decentralised renewable energy production.

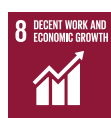


Additional development benefits



SDG 3

Renewables reduce air pollution when displacing polluting energy sources, such as coal.



SDG 8

Development of the industry related to renewable energy and its supply chain supports full employment through the creation of decent jobs.



SDG 9

Development and integration of new clean technologies supports sustainable industrialisation and infrastructure upgrading.



SDG 11

When displacing coal-fired power plants, renewables contribute to lower the environmental impact of cities by reducing the amount of GHG and air pollutants from power generation.



SDG 15

Renewables contribute to conservation of natural habitats through reduced air and water pollution and decreasing water consumption, especially when displacing more polluting or intensive alternatives, such as coal.

Good practice in other countries

China banned the construction of new coal-fired powerplants as a reaction to the falling cost of wind and solar energy. (This ban is currently lifted.)



By 2024, **Chile** will close eight of its oldest coal-fired power plants – equivalent to 20% of its current coal electricity capacity (currently 40% coal share in their electricity mix). Chile will phase out its remaining 20 coal plants by 2040.



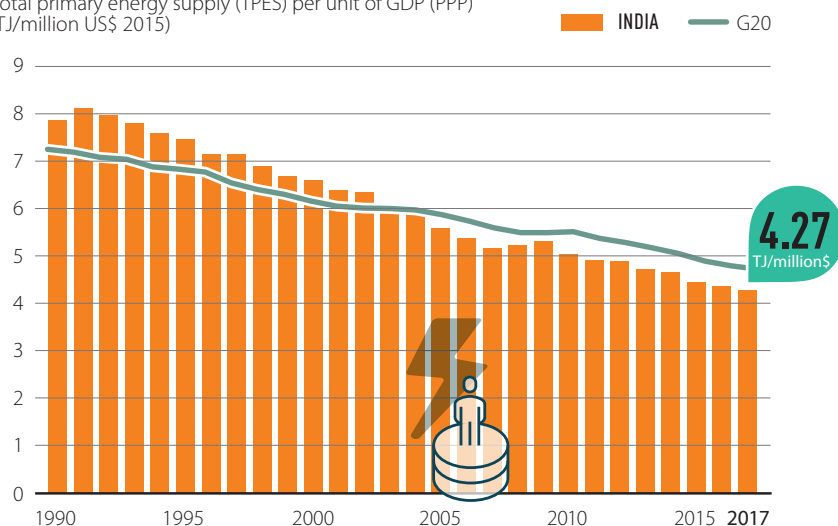
Enhance the emissions intensity target of the NDC

India's NDC target stipulates an emission intensity reduction of its GDP of 33-35% from the 2005 level by 2030.⁷ This target was set before COP21 in 2015. Existing trends show that India is set to overachieve this target. According to India's second Biennial Update Report (BUR), emission intensity of India's GDP had already fallen by 21% between 2005 and 2014.⁸ The Council on Energy, Environment and Water (CEEW) suggests that the emission intensity of GDP will reduce by 48% to 54% across all of their 216 scenarios by 2030, relative to 2005.⁹ Thus, India can upwardly revise its NDC emissions intensity target to reflect this higher ambition.



ENERGY-RELATED CO₂ EMISSIONS⁹

Total primary energy supply (TPES) per unit of GDP (PPP) (TJ/million US\$ 2015)



Source: Enerdata 2018

What does this mean?

Decreasing emission intensity from GDP decouples GHGs from economic prosperity. Furthermore, this is in line with India's goal to develop in a less resource-intensive manner and with far less externalities than developed countries' path of growth. Reflecting

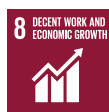
India's achieved progress and trends within its NDC would show a pathway towards decarbonisation and help the country raise its ambition in international climate negotiations.

Additional development benefits



SDG 3

Substantially reducing emissions when moving to a low-carbon economy will cut air pollution due to fuel use as well as tackle associated diseases like respiratory problems.



SDG 8

The development of a new low-carbon industry will support employment opportunities through the creation of safe and decent jobs.



SDG 9

Development and integration of new clean technologies will support sustainable industrialisation and infrastructure upgrading.



SDG 11

Switching to a low-carbon economy will contribute to reducing the environmental impact of cities by reducing the amount of GHG and air pollutants from these areas.



SDG 12

Switching to a low-carbon economy requires sustainable management and efficient use of natural resources.

Good practice in other countries

In 2010, **Singapore** implemented an 'Intelligent Energy System' to enhance the efficiency and resilience of the country's power system. This helped reduce the average interruption time to less than one minute per customer per year.



To meet growing electricity demand while meeting its emissions reduction target, **South Korea** aims to implement a nationwide smart grid network by 2030. Reported transmission and distribution losses are among the lowest in Asia (around 3.5% in 2012).



Adopt a goal of 100% sales of zero-emission vehicles by 2035

In India, transport is the second largest contributor to the country's CO₂ emissions after the industrial sector. It is also a major consumer of fossil fuels and responsible for high imports, traffic congestions, air and noise pollution and road fatalities, particularly in urban areas.¹⁰ Several recent policy initiatives, including the Faster Adoption and Manufacturing of Electric Vehicles (FAME) schemes, have kick-started India's shift towards an electric mobility future.¹¹ FAME II (launched in 2018) and other measures could lead to electric vehicle sales of 30% of private cars, 70% of commercial cars, 40% of buses and 80% of two and three-wheelers by 2030.¹² To fully transition to an electric mobility future by 2050, all new vehicles in public, commercial and private transportation should be electric by 2035.¹³ To this end, additional actions by the government could be taken to ensure the broader adoption and scaling of electric mobility, with greater emphasis on providing affordable and environment friendly public transportation options.^{14 15}

TRANSPORT SECTOR

TRANSPORT EMISSIONS PER CAPITA (tCO₂/capita)



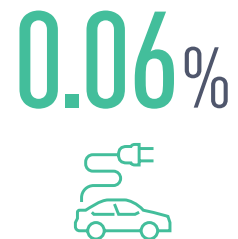
Data from 2017
Source: Enerdata 2018

PASSENGER TRANSPORT (modal split in % of passenger-km)



Data from 2016 | Source: Agora Verkehrswende 2018

MARKET SHARE OF ELECTRIC VEHICLES IN NEW CAR SALES (%)



Data from 2017
Source: IEA 2018

What does this mean?

Beyond enabling the clean movement of people and goods, the electrification of the transport sector would create economic, social and environmental benefits. NITI Aayog and Rocky Mountain Institute estimate that a shared, electric, and connected mobility system could create a US\$300 billion domestic market for electric vehicle batteries

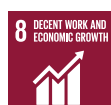
in India by 2030, thus enabling the country to become a hub for electric car manufacturing and innovative and sustainable battery systems.¹⁶ Setting such ambitious climate goals in the transport sector would contribute to avoiding congestion, air pollution and oil import dependency.¹⁷

Additional development benefits



SDG 3

Switching to zero emissions vehicles tackles air pollution through reduced fuel use and improves mental health and well-being by reducing noise.



SDG 8

Shifting to zero-emissions vehicles reduces fossil fuel use and contributes to decoupling growth from environmental degradation. Having new vehicle and fuel types contributes to technological/infrastructure upgrading and economic diversification.



SDG 9

Developing and integrating zero carbon vehicles and their associated infrastructure (e.g. charging networks) supports sustainable industrialisation, adoption of clean technologies and infrastructure upgrading.



SDG 11

Shifting to zero carbon vehicles increases access to safe and sustainable transport systems for all and significantly reduces air pollution in cities.



SDG 12

Switching to zero carbon vehicles increases resource efficiency, reduces air pollution and can support adoption of sustainable practices such as encouraging and enabling users to reduce their transport-related emissions.

Good practice in other countries

In 2018, the city of **Bangalore** published their Plan for Electrification of Public Bus Transport, which recommends up to 50% electric bus deployment by 2022 and 100% by 2030. Now, the Bangalore Metropolitan Transport Corporation is procuring 300 electric buses.

In 2018, the government of **Nepal**'s Province 3 – which includes key cities such as Kathmandu – announced that the sale and distribution of fossil-fuelled vehicles will not be allowed after 2028.

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