



A CAG Initiative

stopppwatch

Volume 2, Issue 10

October 2015

Educating & Informing Stakeholders on Energy, Environment & Thermal Power Plants

INSIDE THIS ISSUE:

<i>India News</i>	2
<i>World News</i>	3
<i>Statistics</i>	4
<i>Regulations & Cases</i>	4
<i>Publications</i>	4
<i>Miscellaneous</i>	4

Relevant Websites & Contacts

Under Secretary,
Right to Information (RTI)
Cell,
Ministry of Environment,
Forests & Climate Change,
Indira Paryavaran Bhavan,
Jor Bagh Road,
New Delhi - 110 003,
India

Tel: 011-24695334
Email: us.rti-mef@nic.in
Web: <http://envfor.nic.in/>

National Green Tribunal

Faridkot House,
Copernicus Marg,
New Delhi - 110 001
India

Tel: 011-23043501
Fax: 011-23077931
Email: rg.ngt@nic.in
Website: <http://www.greentribunal.gov.in/>

INDIA TO CUT EMISSIONS

The Union Environment Ministry submitted its Intended Nationally Determined Contributions (INDCs) to the UN Framework Convention on Climate Change (UNFCCC), committing to cut the emissions intensity of GDP by 33-35 per cent by 2030 from 2005 levels.

The INDCs, which lay out the blueprint for tackling climate change, emphasised eight key goals – sustainable lifestyles, cleaner economic development, reducing emission intensity of GDP, increasing the share of non-fossil fuel based electricity, enhancing carbon sink, adaptation and mobilising finance, technology transfer and capacity building.

Referring to India's INDCs as "balanced and comprehensive", Union Minister for Environment, Forests and Climate Change Prakash Javadekar said that for a developing nation, India's goals for tackling climate change were far more ambitious when compared to that of other developed countries.

The text of the 38-page INDCs submissions reiterated Prime Minister Narendra Modi's emphasis on 'climate justice' in his September 25 U.N. General Assembly address.

"When we speak of climate justice, we demonstrate our sensitivity and resolve to secure the future of the poor from the perils of natural disasters," it quoted Mr. Modi. According to Ministry sources, the INDCs were finalised on September 23, before Prime Minister Narendra Modi left for the U.N. General Assembly in New York and the Cabinet cleared it.

India has committed to 40 per cent of non-fossil fuel energy to be adopted by 2030. It has also set the target of generating 3 billion tonnes of CO2 equivalent of carbon sinks in the form of forests.

The INDCs point to tripling of India's electricity demands by 2030, for which thermal energy is unavoidable. However, Mr. Javadekar pointed out that even for thermal power, emission norms have been made more stringent. India defended its lower per capita emissions, underlining less responsibility to "act" compared to other top emitters such as U.S., China and EU. "Even now, when the per capita emissions of many developed countries vary between 7 to 15 metric tonnes, the per capita emissions in India were only about 1.56 metric tonnes in 2010," the text said.

India has also stated its challenges in terms of human development goals, for which higher energy production and consumption is a must. "No country in the world has been able to achieve a Human Development Index of 0.9 or more without an annual energy availability of at least 4 tonnes of oil equivalent (toe) per capita," it said. The added emphasis on non-fossil fuel energy will not affect the common man in terms of increased energy prices, the Minister assured.

He pointed out that solar power price has reduced from Rs.18 /unit to Rs. 5.9 paisa/unit, matching almost thermal conventional energy. The Minister also highlighted India's 'Solar Alliance' mission to connect countries between the Tropic of Cancer and the Tropic of Capricorn, to help generate more renewable energy to meet the non-fossil fuel target.

As far as financial resources for meeting the targets are concerned, India plans to raise them both at home and seek assistance from the Green Climate Fund.

Mr. Javadekar said that the coal cess alone could help developed and developing nations augment the finances for green technologies. The INDCs are the basis for negotiating the climate change agreement at the U.N. climate summit in Paris coming up in December. Of the 196 UNFCCC member countries, 86 have made their submissions so far.

India's focus on renewable energy lauded

Even as India set itself ambitious targets to tackle climate change, the Intended Nationally Determined Contributions (INDCs) have drawn both bouquets and brickbats. While most think-tanks have welcomed the comprehensive approach to reducing carbon emissions intensity, environmentalists have expressed concern over the continued dependence on coal-fired plants for fuelling the nation's development.

Pujarini Sen, climate and energy campaigner from Greenpeace India said she found India's continued commitment to expand coal power capacity baffling. "Further expansion of coal power will hamper India's development prospects, by worsening the problems of air quality and water scarcity as well as contributing to the destruction of forests and the displacement of communities. Financial analysts have predicted that electricity from renewable energy, will be cheaper than coal in future." Instead, the stress must be on developing decentralised renewable energy systems, as this is the opportunity for 300-million Indians who still lack access to electricity, she said. ([The Hindu](#), October 3, 2015)

STICK TO COAL NORMS, NGT DIRECTS POWER GENERATION COMPANIES

Get rid of objects containing mercury in your home. They're a health risk and harmful to the environment.

The National Green Tribunal (NGT), Pune, has directed power generation companies to strictly adhere to set norms of not using coal having more than 34 pc ash content, thus providing relief to lakhs of people living in the vicinity of such units. The NGT also directed the regulating authority, Maharashtra Pollution Control Board (MPCB), Ministry of Environment and Forest (MoEF) and Central Pollution Control Board (CPCB) to upgrade its verification facilities and keep a strict watch on the power units on a monthly basis.

The verdict Saturday came on a petition by a social activist from Mahadula village near here, Ratnadeep Rangari, seeking directions to power units to follow norms and prevent Vidarbha from becoming a "gas chamber", citing severe health problems already being caused to the people living close to it. The village is a site of a thermal power station operated by Maharashtra State Power Generation Company (Mahagenco). The verdict is of great importance to Vidarbha that houses most coal-based private and government

power units. The tribunal has directed the units to strictly follow norms set by two notifications by the MoEF dated January 2, 2014 and August 26, 2015.

The first seeks strict compliance by power units on using coal that has ash content of less than 34 pc. Coal-based thermal power plants are single largest source of particulate emission besides greenhouse gases. The important co-benefit of the initiative would be lesser GHG emissions i.e. lesser carbon footprint in thermal power generation, the NGT stated.

The second notification made it mandatory for State Pollution Control Board to include a condition specifying ash content in raw or blended or beneficiated coal to be supplied by the coal mine or company, as applicable, and used by thermal power plants, in the existing consent orders issued under Air (Control of pollution) Act, 1981 and in Environmental Clearance issued under Environment (Protection) Act, 1986 to thermal power plant and coal mine or company. The NGT directed

MoEF to co-ordinate with State Pollution Control Boards to ensure compliance of this direction and submit a compliance report by January 1, 2016. MPCB had, in its affidavit, expressed helplessness to monitor quality of coal being supplied by coal companies and consumed by power companies. It only said that it has been repeatedly directing the two entities to ensure requisite quality of coal is used.

On this, the NGT directed SPCBs and CPCB to develop capacity for sampling and analysis of coal ash content at their respective laboratories as per Indian standards within six months and submit a compliance report by May 31, 2016.

The coal companies have claimed that they have been supplying quality coal and checks at power units prove their claim. An RTI query by the petitioner revealed ash content at Mahagenco's Khaparkheda, Bhusaval and Paras units in January 2014 were 46.80 pc, 49.75 pc and 43 pc, respectively. ([Indian Express](#), 18 October, 2015)

HOW MUCH IS OUR ENVIRONMENT WORTH?

In May this year, Vincent Van Gogh's depiction of an autumnal landscape in southern France, Les Alyscamps, sold for more than \$66 million at auction, close to the most ever paid for a landscape painting. If \$66 million gets you a painting of a row of poplars, what price tag do you put on the poplars themselves?

For that matter, how do you value the entire forest? Or a mangrove swamp? A grassland? These environmental assets—like many works of art—are priceless from an aesthetic point of view.

Our economies, however, rarely trade in the currency of a beautiful landscape. The value of these ecosystems is instead tallied from their rate of commodity production. If this value overlooks priceless aesthetic qualities, it also regularly underestimates the contribution of ecosystem services that are less apparent, though quantifiable and just as irreplaceable.

The true value of the planet's ecosystems is frequently misrepresented, if not invisible, in markets and economic decision-making. But the real economies that underpin our societies are themselves fundamentally rooted in the natural world.

In a forest, the value of timber can be significant and obvious on the open market. But the capacity of the forest to prevent soil erosion in surrounding agricultural land is not so easily or readily accounted for.

A mangrove swamp is an important and valuable barricade against storms. But its capacity to sequester carbon and help prevent climate change goes unappreciated in economic terms.

Grasslands can be an economic foundation of communities, both for their arable land and as a draw for wildlife-based

tourism. But what of their function as a water catchment, offering strategic ability to manage this resource?

Without awareness of the true value of these ecosystem services, and how GDP depends on the health of ecosystems, we are bound to continue to exploit them in an unsustainable way.

The U.N. Environment Programme, through its flagship project ProEcoServ, has been developing ecosystem assessment tools to integrate the value of ecosystem services into policy, investment decisions and macroeconomic models.

Over the last four years, ProEcoServ has worked in four pilot countries—Chile, South Africa, Trinidad and Tobago, and Vietnam. The results are remarkable: We have identified almost \$1 billion worth of ecosystem benefits in only four test cases.

We found, for example that the Northern Range forests on Trinidad provide up to \$622 million of soil retention services annually to the national economy. That's the equivalent of 6% of government tax revenue. In Vietnam's Ca Mau province, our analysis showed more than 45,000 hectares of mangroves generate ecosystem services worth up to \$1,560 to \$2,985 annually per hectare. In South Africa, a map of strategic water source areas indicated they make up only 8% of the land area, but provide a staggering 50% of the water, collectively contributing to more than 60% to the national economy.

These ecosystem benefits, often only apparent after careful analysis and study, exist in virtually every nation on the planet.

The value of this knowledge lies in its application. In this capacity, ProEcoServ was able to



work with decision-makers in the pilot countries to integrate our findings into social and economic policy.

Chile offers a demonstrative example. The San Pedro de Atacama municipality in the north of the country is one of the driest landscapes in the world. A tourist boom in the last decade has attracted tens of millions of dollars to the local economy and a 50% increase in local population. But water to supply this influx is scarce in the desert, and improper resource management can undermine the delicate Andean ecosystems tourists come to see.

Working with academic and government partners, ProEcoServ mined satellite and social media data to determine distribution of water resources and tourist flows; the information was then incorporated into a monitoring tool for stakeholders. The result was the first tourism development plan for the municipality that integrates ecosystem services in tourism management.

Economic benefits of ecosystems extend far beyond exploiting them for resources. The ProEcoServ pilot projects show that conservation is less a matter of preserving landscapes only for their aesthetic appeal, but increasingly a matter of securing livelihoods for generations to come.

Perhaps if Van Gogh been able to convey the soil retention services of his poplars, his masterpiece would have set sales records. ([Time](#), October 8, 2015)

Economic benefits of ecosystems extend far beyond exploiting them for resources

Citizen consumer and civic
Action Group (CAG)

9/5 II Street,
Padmanabha Nagar,
Adyar,
Chennai 600020.
Tamil Nadu

Phone: 91-44-24460387
Telefax: 91-44-24914358
Email: tpp@cag.org.in

www.cag.org.in

<http://thermalwatch.org.in/>

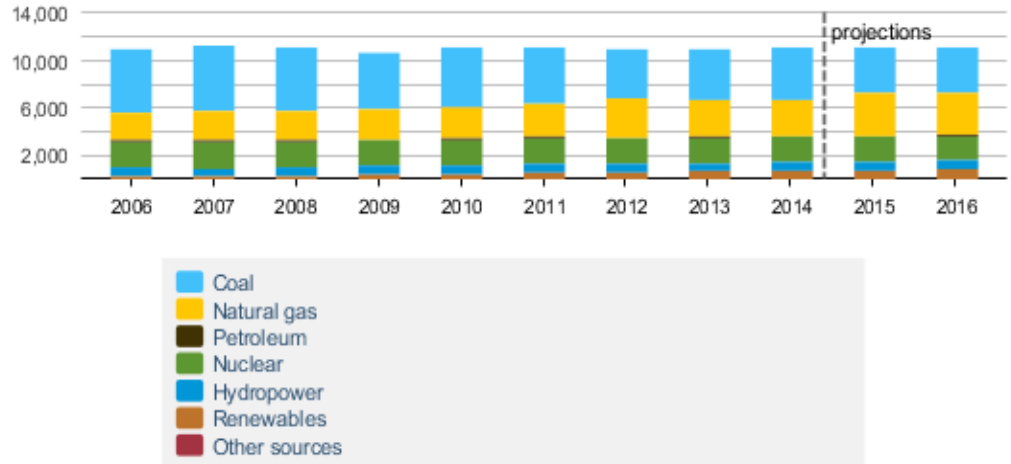


Citizen consumer and civic Action Group (CAG) is a non-profit, non-political and professional organization that works towards protecting citizens' rights in consumer and environmental issues and promoting good governance processes including transparency, accountability and participatory decision making.

U.S. SHORT-TERM ENERGY OUTLOOK 2015

U.S. Electricity Generation by Fuel, All Sectors

(thousand megawatthours per day)



Source: Short-Term Energy Outlook, December 2015

REGULATIONS AND CASES

- NGT, Judgment of the National Green Tribunal regarding pollution caused by coal based thermal power plants, Vidarbha region, Maharashtra, October 2015. click [here](#)
- MOEF, Recognition of pvt. Laboratories under EP Act 1986, October 2015. click [here](#)

PUBLICATIONS

- UNDP, Rural Electrification with Renewable Energy in The Gambia, 2015. click [here](#)
- UNDP, Guidance Note on Integrating Environment linked Poverty Concerns into Planning, Budgeting, and Monitoring Processes, 2015. click [here](#)

MISCELLANEOUS

- Timothy Johnson, Energy and the Environment 2.0, TEDx Talks, click [here](#)
- Ajman 4th International Environment Conference 2016, United Arab Emirates, click [here](#)