

stoppwatch

Volume 2, Issue 4 April 2015

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

INSIDE THIS ISSUE:

India News	2
World News	3
Statistics	4
Regulations & Cases	4
Publications	4
Miscellaneous	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: <u>http://</u> www.greentribunal.gov.in/

RISING THERMAL COAL IMPORTS SET TO PROPEL INDIA TO TOP SPOT

India may soon become the world's largest importer of thermal coal, nudging the current top-ranking China to second position. India's thermal coal imports have begun to attract global attention as volumes steadily grow and China begins to slow.

Although India has been among the top destination markets for thermal coal over the last ten years or so, the expectation of increased demand in the coming years – on account of economic growth prospects, growing power demand and government policies – is driving traders to keep a close watch on developments here.

Over the last decade, India's thermal coal demand has grown robustly, estimated at around 25 per cent CAGR. Currently, at 150 million tonnes (mt) import, the country accounts for about 16 per cent of the seaborne trade of 915 mt. Although a large coal producer, Indian coal quality

is sub-standard with a high ash content of over 30 per cent. So, many power plants routinely blend indigenous coal with imported ones to derive productivity benefits.

Starting at a modest 25 mt in the year 2000, thermal coal imports expanded to 50 mt in 2009 and to 100 mt in 2012 and further to 150 mt in 2014. Projections for the next three years are placed at 165 mt, 180 mt and 190 mt until 2017. At the same time, domestic thermal coal production is expected to increase by approximately 30 mt per annum from 510 mt in 2014.

For years, coal-fired power capacity additions have exceeded other forms of power generation while domestic feedstock production growth has trailed demand growth. By 2018, India is poised to overtake China as imports potentially reach 200 mt accounting for a fifth of the world seaborne thermal coal trade. According to the Ministry of Coal, although India has adequate coal reserves (over 300 billion tonnes of which 125 billion tonnes are in the 'proved' category), actual production falls short of consumption demand and the gap is met through imports.

"The domestic production of coal has been constrained due to problems in expanding the capacity arising from difficulties in land acquisition, geo -mining conditions, environment and forest clearance issues. Inadequate infrastructure is another constraining factor," the government has said.

For coal exporters such as Indonesia, South Africa and Australia, India is some kind of a saviour even as Chinese coal imports are slowing and may not anymore be the buyer of last resort. It is generally known that China's metals and mining sector is not in a good financial shape.

(<u>Hindu Business Line</u>, Apr 5, 2015)

NLC UNIT-II BEGINS COMMERCIAL OPERATION

The second 250 MW unit of Thermal Power Station-II Expansion has commenced commercial operation, while the first unit of similar capacity is expected to be commissioned, B. Surender Mohan, Neyveli Lignite Corporation (NLC) said. He said the second unit of 250 MW had attained Commercial Operation Declaration (COD). In addition two units of 500 MW each of NLC Tamil Nadu Power Limited (NTPL), a joint venture of the TANGEDCO and the NLC in Tuticorin, is expected to commence power generation by April 2015, increasing the total power generating capacity from 2,490 MW to 4,240 MW in the next two months. Mr. Mohan said the Union Ministry of Environment and Forests had given clearance to the NTPL Orders project on April 16. Civil works have commenced and orders have been placed for steam generator and turbo generators in the Neyveli New Thermal Power Station. (<u>Hindu</u>, April 23, 2015) (edited)

CO2 EMISSION FROM THERMAL PLANTS HIGHER THAN GLOBAL STDS: GOVT

Admitting that emission of carbon dioxide (CO2) from thermal power plants in India was higher than global standards, government today said it was due to inferior quality of coal and its higher consumption.

Replying to a question in Rajya Sabha on the issue, Coal Minister Piyush Goyal said renovation, modernisation and life extension of old thermal power generating units and retirement of old and inefficient thermal generation units has been undertaken in a phased manner.

"The CO2 emission from thermal power plants in the country is comparatively higher than the global standards due to inferior quality of coal and higher ambient air temperature and cooling water temperature in India, resulting in more consumption of coal," he said.

The Minister said "a total of 3,115 MW has already been retired till date; another 2,667 MW will be retired by the end of the 12th Plan. Obviously, this is a process which takes several years. We have now come out with a new policy, and in the near future, we shall go in for a massive re-substitution programme," claiming that the policy has been widely hailed.

Maintaining that public sector units owning old plants, the Minister said "all the owners of these old plants have been asked to give their specific programmes to either replace them or go in for renovation and modernisation. Already some 2,500 MW - I have the exact figure-has b e e n r e p I a c e d . "

Goyal said one of the first steps the government took was to lay out a policy for completely rehabilitating and changing over the old plants to new ones of supercritical technology. He said one of the constraints for changeover from old technology to new had been that the coal linkages were given for a particular plant only and were not allowed to be enhanced or changed and the old plants were not able to go in for new technology. (Business Standard, April 27, 2015)

STATUS OF MONITORING OF INDUSTRIAL POLLUTION (Lok Sabha, 2015)

	Sectorwise Number of industries inspected under ESS to whom Directions under															
	Section 5 & Sec 18(1)(b) issued during 2011-2015 (Jan 2015)															
N	Sector		2011-12		2012-13			2013-14			2014-15			Sub-Total		
0.			1	-												
		No. of Industries inspected	Sec 5	Sec 18(1) (b)	No. of Industries inspected	Sec 5	Sec 18(1) (b)	No. of Industries inspected	Sec 5	Sec 18(1) (b)	No. of Industries inspected	Sec 5	Sec 18(1) (b)	No. of Industries inspected	Sec 5	Sec 18(1) (b)
1	Aluminum	2	1	0	0	0	0	0	0	0	2	0	0	4	1	0
2	Cement	32	5	1	36	5	4	24	2	3	7	0	0	99	12	8
3	Chloralkali	3	1	0	3	0	0	2	1	0	2	0	0	10	2	0
4	Copper	1	0	0	1	0	0	2	0	0	0	0	0	4	0	0
5	Distillery	21	8	2	33	4	1	19	1	0	23	6	0	96	19	3
6	Dye & Dye Intermediates	12	3	0	6	0	0	6	0	0	2	0	0	26	3	0
7	Fertilizer	16	1	0	20	2	1	10	0	0	2	1	0	48	4	1
8	Iron & Steel	23	4	4	13	4	0	25	2	1	11	2	1	72	12	6
9	Pesticide	12	1	0	6	0	0	6	1	0	1	0	0	25	2	0
10	Petrochemical	7	0	0	8	0	0	10	1	0	4	1	0	29	2	0
11	Pharmaceuticals	26	6	5	28	1	0	29	6	0	7	0	0	90	13	5
12	Pulp & Paper	23	9	3	20	5	1	24	6	1	7	1	0	74	21	5
13	B Refinery	4	2	0	6	1	0	2	0	0	1	0	0	13	3	0
14	Sugar	33	2	12	27	3	2	19	0	0	16	0	0	95	5	14
15	5 Tannery	8	1	2	7	0	1	5	0	0	4	0	0	24	1	3
16	Thermal Power Plant	37	6	2	33	2	3	15	1	1	4	0	0	89	9	6
17	Zinc	0	0	0	4	0	0	3	0	0	0	0	0	7	0	0
	TOTAL	260	50	31	251	27	13	201	21	6	93	11	1	805	109	51

Try the <u>GREENDEX</u> Calculator

*Environmental Surveillance programme (ESS)

AIR POLLUTION COSTS EUROPEAN ECONOMIES US\$ 1.6 TRILLION A YEAR IN DISEASES AND DEATHS, NEW WHO STUDY SAYS

A staggering US\$ 1.6 trillion is the economic cost of the approximate 600 000 premature deaths and of the diseases caused by air pollution in the WHO European Region in 2010, according to the first-ever study of these costs conducted for the Region. The amount is nearly equivalent to one tenth of the gross domestic product (GDP) of the entire European Union in 2013.

The new study was published today by the WHO Regional Office for Europe and the Organisation for Economic Cooperation and Development (OECD) as a 3-day high-level meeting on environment and health in Europe opens. Over 200 representatives from European countries and international and nongovernmental organizations gather in Haifa, Israel, on 28–30 April 2015 to look at achievements, gaps and challenges & future priorities.

"Curbing the health effects of air pollution pays dividends. The evidence we have provides decision-makers across the whole of government with a compelling reason to act. If different sectors come together on this, we not only save more lives but also achieve results that are worth astounding amounts of money," says Dr Zsuzsanna Jakab, WHO Regional Director for Europe. "Cross-sectoral work is the backbone of the environment and health process, which was initiated 26 years ago, and it is even more relevant today in the discussions taking place at this meeting in Haifa."

A ground-breaking report: economic cost of the health impact of air pollution in Europe

Economic cost of the health impact of air pollution in Europe is the first assessment of the economic burden of deaths and diseases resulting from outdoor and indoor air pollution in the 53 countries of the Region.

The economic cost of deaths alone accounts for over US\$ 1.4 trillion. Adding another 10% to this, as the cost of diseases from air pollution, results in a total of almost US\$ 1.6 trillion. In no less than 10 of the 53 countries of the Region, this cost is at or above 20% of national GDP (see Annex for data by country). The study uses the methodology applied in a 2014 report by OECD and makes the calculations based on the most recent economic estimates of the health impacts of air pollution.

The economic value of deaths and diseases due to air pollution – US\$ 1 600 000 000 000 – corresponds to the amount societies are willing to pay to avoid these deaths and diseases with necessary interventions. In these calculations, a value is attached to each death and disease, independent of the age of the person and which varies according to the national economic context.

Air pollution: the single largest environmental health risk

Over 90% of citizens in the Region are exposed to annual levels of outdoor fine particulate matter that are above WHO's air quality guidelines. This accounted for 482 000 premature deaths in 2012 from heart and respiratory diseases, blood vessel conditions and strokes, and lung cancer. In the same year, indoor air pollution resulted in an additional 117 200 premature deaths, five times more in low- and middleincome countries than in highincome countries.

"Reducing air pollution has become a top political priority. Air quality will be a key theme at the next Environment for Europe Ministerial Conference in Georgia in 2016", says Mr Christian Friis Bach, Executive Secretary of the United Nations Economic Commission for Europe (UNECE). "Fifty-one countries are today finding joint solutions in the framework of the UNECE Convention on Longrange Transboundary Air Pollution. This work must be strengthened to reduce air pollution even further and extended to more countries and to other regions."

"About 2500 people are estimated to die in Israel annually as a result of exposure to air pollutants. The main source of air pollution is transportation, mainly in major city centres," says Mr Ofir Akunis, Deputy Minister of Environmental Protection and Member of Knesset (Parliament) for Israel. "Since 2011, the Ministry of Environmental Protection's Clean Air Law regulates pollutants from major sources such as transport, industry and energy in accordance with the most stringent standards. The Ministry aims to use all available resources to reduce air pollution, as this means saving the lives of thousands of people, as well as billions to the Israeli economy".

Improving environment and health in Europe

The cost of the health impacts of air pollution is only one of many studies that will provide evidence on the environmental impacts on health to be released at the Haifa meeting.

Another new report, Improving environment and health in Europe: how far have we gotten? jointly published by WHO and UNECE, informs that one in four Europeans still falls sick or dies prematurely from environmental pollution. Data from several surveys in priority thematic areas such as water and sanitation, air quality, the day-to -day surroundings of children's lives, chemicals and asbestos, climate change and health inequalities all show that while progress has been remarkable, it has been uneven. (WHO) (WHO, 28 April 2015,)

Over 90% of citizens in the EU Region are exposed to annual levels of outdoor fine particulate matter that are above WHO's air quality guidelines. 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





Established in 1985, Citizen consumer and civic Action Group (CAG) is an advocacy and campaigning group that works towards protecting citizens rights in consumer and environmental issues and promotes good governance processes including transparency, accountability and participatory decision-making.

INVESTMENT IN GLOBAL ENERGY SUPPLY BY FOSSIL FUEL, NON-FOSSIL FUEL AND POWER T&D (<u>IEA</u>)



Notes: Non-fossil fuel includes all renewable technologies, nuclear and biofuels. Power T&D is transmission and distribution for the power sector: this cannot be assigned to either fossil-fuel or non-fossil fuel use.

Around 70% of energy supply investment in 2013 was related to fossil fuels. Non-fossil fuel investment increased from around USD 65 billion in 2000 to a high of USD 310 billion in 2011, before falling back to less than USD 260 billion in 2013, with its share of total energy supply investment at 16%, versus 9% in 2000. The remainder, some USD 250 billion in 2013, consists of investment in electricity transmission and distribution (T&D) grids; while this figure rose in absolute terms since 2000, its share in the total fell from 22% to 15%.

REGULATIONS AND CASES

- European Union, Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control). Click here
- National Green Tribunal, Ratandeep Rangari Vs. State of Maharashtra & Ors Applicano NO.19/2014 (WZ), click <u>here</u>

PUBLICATIONS

- African Development Bank (AfDB), Development Effectiveness Review 2014: Energy, 2015. click <u>here</u>
- European Union, Environmental Impact Assessment , Rulings of the Court of Justice, 2013. click here

MISCELLANEOUS

- IEA, Energy Statistics Training Course, October 2015. click here
- International Center for Remote Sensing of Environment (ICRSE) and the German Aerospace Center (DLR), 36th International Symposium on Remote Sensing of Environment, Berlin, Germany. Click <u>here</u>