LOW-CARBON COMMITTEE CHARTS HIGH-CARBON GROWTH

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In January 2010, the Planning Commission, Govt. of India appointed a 26-member Expert Group to prepare a 'low-carbon growth strategy' for India called the 'Report (draft) of the Expert Committee on Low-Carbon Strategies for Inclusive Growth in India'. The group, chaired by Kirit Parikh, former Member, Planning Commission, has 25 other members from various walks of life. The terms of reference of the committee are as follows:

1) Review existing studies on low-carbon growth/low-carbon pathways for India prepared by various organisations.
2) Conduct further analysis, as required, to assess low-carbon options for the Indian economy.
3) Present a report outlining the roadmap for India for low-carbon growth. This would include the following:
   - An evaluation of some key alternative low-carbon options with an analysis of their cost-benefits and relative merits and demerits.
   - An Action Plan comprising critical low-carbon initiatives to be undertaken, including sector-specific initiatives, along with a suggested timeline and targets starting 2011 that can feed into the 12th Plan process.
   - List of enabling legislation, rules and policies, as required to operationalise the low-carbon roadmap.

One of the major flaws in the constitution of the committee was the absence of some critical agencies from the government such as the Ministry of New and Renewable Energy (MNRE). Admitted that an 'Expert Group' is not to be filled up with government officials, but key stakeholders like MNRE should certainly have been there. The omission of MNRE also has great negative symbolic value, in that it refuses to recognise the importance of renewables in the development of a low-carbon economy. Stakeholder buy-out is important in such critical areas and their involvement at the stage of report preparation would have smoothened the process of their acceptance of the recommendations.

'Running with the Hare and Hunting with the Hounds'

India's Integrated Energy Policy (IEP)—prepared by an Expert Committee also incidentally chaired by Kirit Parikh—which received Cabinet approval in late 2008 had a heavy methodological bias in favour of fossil fuels. We have, in a previous section of 'Energy Current', done a detailed critique of the IEP (*Green Energy*, Vol.5, No.3, May–June 2009, pgs.14–18). To refresh our memories, the critical flaws of the IEP are mentioned once again below:

- Visualising only 5% to 6% contribution of renewables in India's energy mix by 2031–32.
- Sweeping assumption that renewables would be critical for India's energy independence beyond 2050 only.
- Unvalidated assumptions based on the belief in double digit economic growth that India would require 800 GW of power by 2032.
- Neglect of possibility of technology leapfrogging in renewables and their cost-reduction.
- Undue optimism about the continued availability of fossil fuels in abundant quantities up to 2050. This blind belief leads to a virtual 'coal delusion.'
- Numerous contradictions within the report about facts, data and conclusions.

However, with the announcement of the National Action Plan on Climate Change (NAPCC), the IEP can now be relegated to the background. It must be mentioned though that the 'Report (draft) of the Expert Committee on Low-Carbon Strategies for Inclusive Growth in India' being discussed in this column has tried to update its stance, to the extent that there is a shift in goal posts marginally. But the fixation with fossil fuels and the art of omissions and oversights continue. In the IEP, there was a certain debunking of solar technology as the source of grid power. It even went on to mention that concentrating solar thermal power technology (CSP) was not ready for commercialisation. This was done at a time when CSP was seeing a worldwide revival. Here, at least the low-carbon committee recognises that even if 1% of the land area of the country is utilised, we would generate 500 GW of power. But elsewhere in the report it is mentioned that since other cheaper sources are available, long-term deployment of solar is not required and the draft report does not present a definitive strategy up to 2050 for emissions reduction. Besides, the report covers the period up to 2020 only and hence it is irrelevant to its own mandate. The whole attempt seems to be to stay with fossil fuels while paying lip service to renewables. Or else, the committee tries to 'run with the hare and hunt with the hounds'.

Debunking NAPCC and JNNSM

The (draft) 'Report of the Expert Committee on Low-Carbon Strategies for Inclusive Growth in India' bears the hallmark of a hurriedly prepared

document and is disappointing, given that it called for a transition to a low-carbon path across all sectors of development. There are errors both of commission and of omission. Amongst the former, it asserts that coal-based power is currently the cheapest option (hydro is the cheapest and where emissions are concerned, it is clean power); at another place, the text indicates (for the commercial sector) that lighting is the highest load whereas the accompanying pie-chart in the report (fig 3.12 of the report) shows HVAC load as the highest load. Egregious omissions include the lack of acknowledgment of RPS targets of 5%–15% in incremental steps of 1% as indicated in the NAPCC and mostly being mandated by electricity regulatory commissions across the country.

The NAPCC targets have been completely overlooked. There is no attempt to analyse the implications of this target of 15% RE by 2020. For example, how much capacity will have to be added, what technologies will have to be deployed, the financial implications, the required policy measures, etc.

The same attitude continues in relation to the approved targets of the Jawaharlal Nehru National Solar Mission (JNNSM). The draft report makes a cursory statement that "solar installed capacity if pursued with seriousness could grow to 20,000 MW by 2020." Elsewhere it asserts that "such a large deployment of solar capacity may not be required because other sources are able to meet the demand at a lower cost." Then there is a condescending remark that, "we have considered solar, given that it will be a crucial energy source for India's future power beyond 2020." Such grudging admission lacks a vision or a sense of urgency to plan for scaling up solar power. If solar has to emerge as a major power source beyond 2020, the next ten years are crucial for research, planning, learning, establishing the manufacturing base, resource assessment, land identification, etc. Such cursory approach as seen in the draft report only amounts to quietly debunking the NAPCC and JNNSM.

'Nuclear' Faith,'Renewable' Denial

The stance of the Expert Committee towards renewable energy becomes clear when compared to its stance towards nuclear. In the case of nuclear, it is confidently asserted that it could contribute 21,000 MW by 2020. Taking the starting nuclear figure as 4560 MW in 2010, this implies a nuclear CAGR of 16.5% p.a. up to 2020, well above the assumed GDP growth rates even though it is acknowledged that nuclear capacity addition is subject (unlike RE) to several factors such as economics, site availability, and fuel supply agreements. In contrast to this nuclear optimism, wind is expected to grow from 4020 MW (2005) to 25,000 MW (2020). In actuality, wind has already reached 13,000 MW installed capacity now. In 2010–11, about 2500 MW capacity is being added. If a flat average capacity addition of 2500 MW per year is assumed for the next 10 years, total wind power capacity by 2020 could reach 38,000 MW. If projections by WISE or the Global Wind Energy Council are considered, this will be much higher. The callous attitude towards solar has already been mentioned earlier. These are the two main RE technologies which will have to be deployed on a large scale if we really need a low-carbon energy economy. However, after making the statement about solar energy, just a few lines below, it is acknowledged that "India will continue to face shortage in 2020, which itself might place an energy constraint on growth." How the evident contradiction between these two statements, "sources are able to meet demand" and "continue to face shortage" can both be held to be true, is for the Expert Committee to explain. Several such methodological lapses in the accompanying tables suggest an over-optimistic projection for nuclear and an indifferent or even pessimistic view with respect to RE. This bias strikes at the very root of the Expert Committee's mandate to chart out low-carbon strategies for growth. If the most promising low-carbon power generation technologies are dealt with in this manner, the committee's mandate cannot be fulfilled.

Similarly, while making a case of modal shift of freight from road to rail and consequent need for efficiency improving investments in rail, it has completely ignored even a preliminary assessment of inter-modal shift to shipping and inter-modal shift from air to rail. Similarly, it refuses to countenance the need to reduce the growth of private vehicles; it does not acknowledge the institutional failure to implement the Energy Conservation Act, 2001, while acknowledging the distinct possibility of an oil constrained future; it does not answer the question of alternate RE-based cooking fuels to replace LPG. Overall, the draft report carries forward the pretence that 8%–9% p.a. growth is going to be possible in a fossil-fuel-constrained future. That an Expert Committee should be citing Wikipedia as reference material is likely to raise eyebrows internationally as regards ultimate expertise.

Conclusion

The world is moving towards a 100% RE power scenario by 2050. It is now recognised that work on such war-footing is required, if we have to contain climate change and ensure energy security. The draft report of the low-carbon committee, like its predecessor IEP, fails to address the gravity of the problem and does not come up with any viable solutions. In many ways, the draft report is an exercise designed to make omelettes without breaking eggs.

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