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Budget 2023-24 – Green growth

Union Budget 2023-24 prioritises Green Growth to ensure creation of green ecosystem

February 2023

CLIMATE CHANGE

The biggest crisis of our time



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Green growth is one of the priorities identified in the Union Budget 2023-24 for the next 25 years to ensure the creation of a green ecosystem

Apart from supporting funding for Green infrastructure, the Union Budget 2023-24 also focuses on creating climate consciousness among all stakeholders

However, the timely execution of Green infrastructure, being at a relatively nascent stage in India, remains to be seen



- Most of India's fossil fuel requirements are met through imports. To reduce import dependence and increase the use of green energy going forward, the Union Budget 2023-24 has identified 'Green Growth' as one of the seven priorities (Saptarishi) for the next 25 years.



- Green growth will be focusing on various schemes and missions. For instance, the National Green Hydrogen Mission has been given an initial outlay of Rs. 197 billion for the next decade. Implementation will ensure reduction of fossil fuel imports by Rs. 1 trillion and cut in Greenhouse Gas (GHG) emissions by 50 MMT by 2030.



- The Union Budget has also provided Rs 350 billion for capital investment in green infrastructure. This may form a negligible share of the total capex requirement for the next decade, which is approx. Rs 30-40 trillion (for most polluting sectors such as power, transport and industry). The Government will have to gear up the allocations in the coming decade to ensure timely execution of the green projects.



- Power, the largest polluting sector, needs priority status for sustainable development. Continued focus on the renewable energy sector was visible in the current Budget with announcements towards viability gap funding for battery storage systems, framework for pumped hydro projects, increased allocation to distribution sector to aid the discoms, investments towards transmission infrastructure for 13 GW renewable energy from Ladakh.



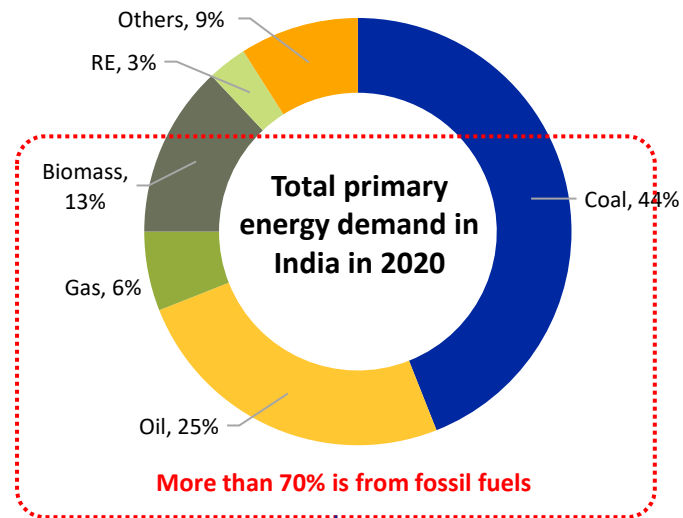
- To reduce import dependency of fertilisers, the Budget has announced the PM PRANAM scheme to incentivise promotion of alternative fertilisers and balanced use of chemical fertilisers to achieve an optimal balance of nitrogen, phosphorous and potassium (NPK) in the soil. The National Green Hydrogen Mission also plans to encourage the adoption of indigenous green ammonia-based fertilisers.



- Apart from the above, Budget 2023-24 mentioned multiple other schemes, policies (Green Credit programme, mangrove policy etc) and benefits (duty exemption, vehicle scrappage policy etc) to help create a green ecosystem. The agenda is also to create climate consciousness among farmers, organisations and society. However, timely execution of Green infrastructure, which is at a nascent stage in India, will be crucial.

Green growth as priority for next 25 years showcases India's commitment towards Net Zero

Exhibit: Total primary energy demand in India, 2020



40% of the primary energy requirement is met through imports currently

- To reduce import dependence and increase the use of green energy going forward. The Budget has included 'Green Growth' as one of the seven priorities (Saptarishi) for the next 25 years

Seven priorities (Saptarishi) adopted for next 25 years

1. Inclusive Development

2. Reaching the Last Mile

3. Infrastructure and Investment

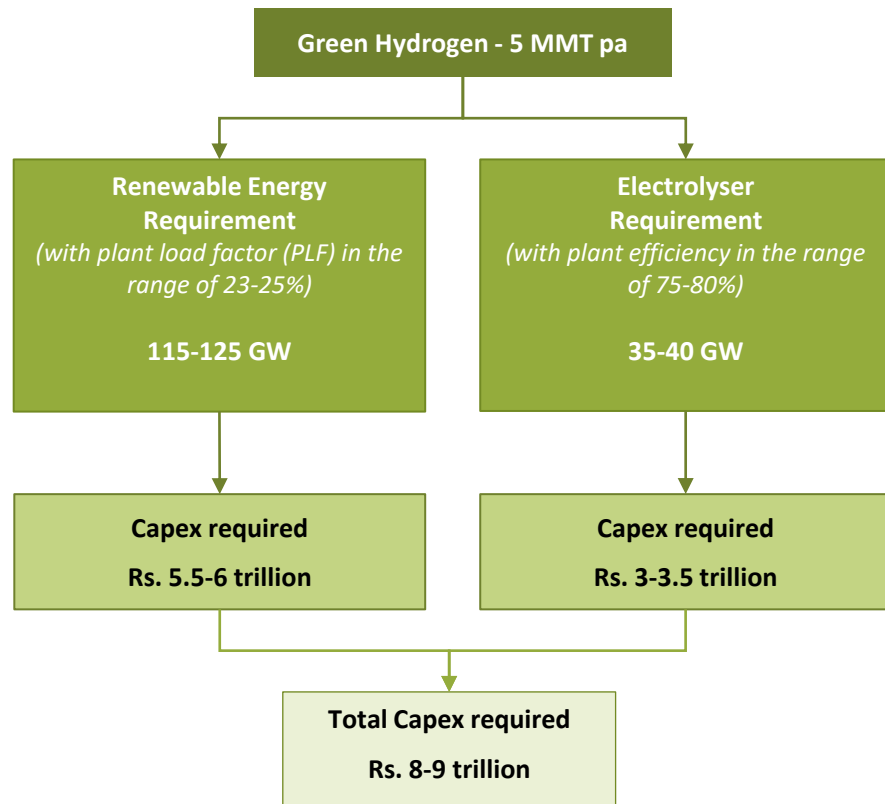
4. Unleashing the Potential

5. Green Growth

6. Youth Power

7. Financial Sector

National Green Hydrogen Mission - Successful implementation to ensure reduced usage of fossil fuel & GHG emissions



Outlay - Rs 197 billion

- The Mission targets to reach 5 MMT per annum by 2030, needs capex in the range of Rs. 8-9 trillion
- RE capacity required as above is estimated to remain in excess of the same needed to meet 50% of grid energy consumption mix under policy target of 500 GW of non-fossil fuel-based capacity by FY2030.

Reduction in fossil fuel imports by Rs 1 trillion

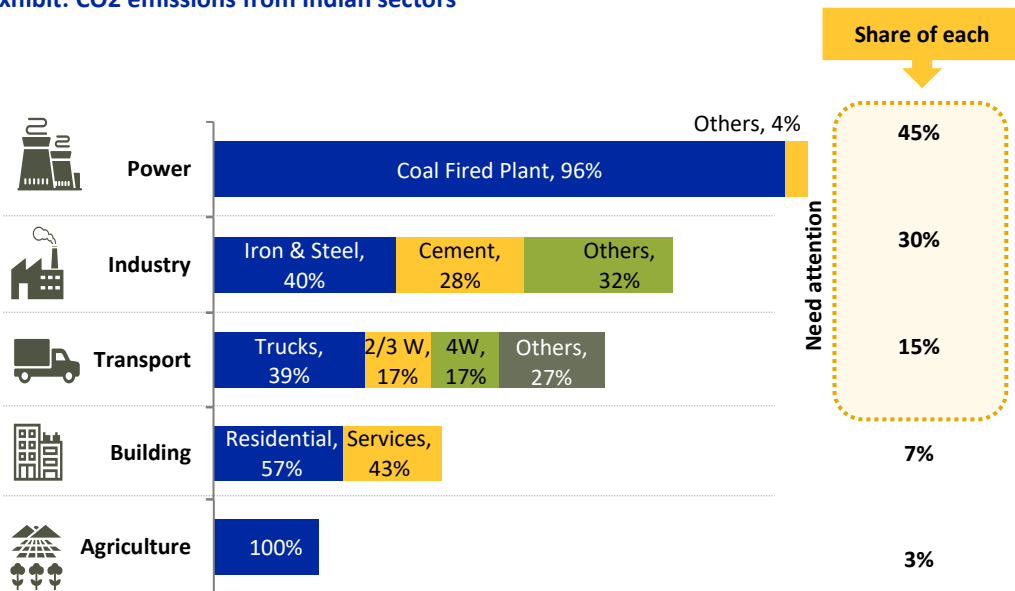
- Successful implementation of the Mission will imply a ~3-8% decline in imports of POL and coal.

Reduction of 50 MMT in Green House Gas (GHG) emission by 2030

- Adoption of Green Hydrogen Mission expected to form ~5% of the total target of reduction of 1 BT of emission by 2030 (as per five-pronged strategy (Panchamrit) taken at COP26).

Gearing up of capital expenditure required to build Green infrastructure

Exhibit: CO2 emissions from Indian sectors



The infrastructure investments needed for most polluting sectors such as power, industry and transport for next decade*

Rs 30-40 trillion*

Outlay - Rs 350 billion

- Budget outlay of Rs. 350 billion forms a negligible share of the total capex requirement for the next decade. Gearing up in Capital expenditure necessary for the next decade to meet the infrastructure requirements.
- However, Government has also launched other funding avenues like Green Bonds, Green Fixed Deposits, PLI and other schemes (FAME, National policy on Biofuels etc), to support Green infrastructure funding too.

Power, industry and transport together emit ~90% of CO2 as per 2019 International Energy Agency data

Viability Gap Funding (VGF) for battery storage projects and framework for pumped hydro projects

- Battery storage, or battery energy storage systems (BESS), are devices that enable energy from renewables, like solar and wind, to be stored and then released when customers need power the most.
- The increased capacity addition of variable Renewable Energy (RE) resources in recent years has emphasised the need for grid flexibility to accommodate its inherent intermittency.
- As the cost of battery storage is high, VGF will be provided to support capital expenditure of the projects. **VGF for BESS is a positive step for the RE sector as it would improve its competitiveness and enable its adoption by distribution companies.**
- **Framework for pumped hydro projects is a positive step to improve grid stability amid rising share of RE.** Timely implementation is key.

13 GW renewable energy from Ladakh – Investment Rs 207 billion

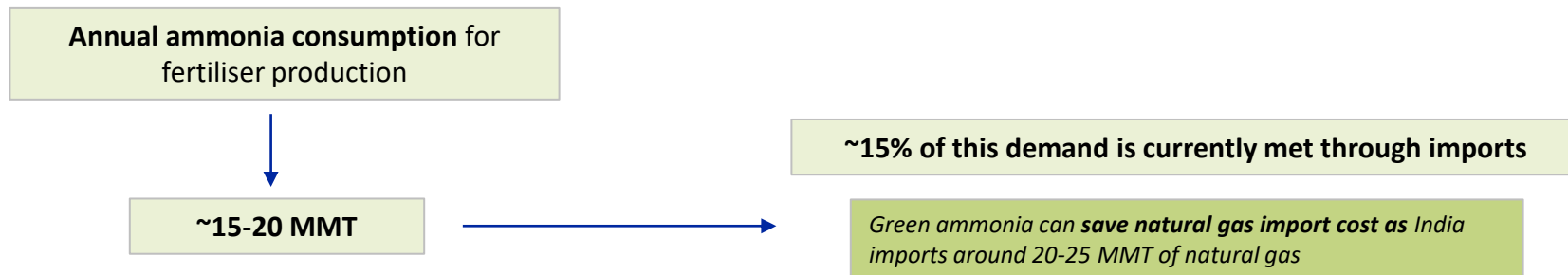
- Transmission infrastructure to evacuate RE power from Ladakh to boost capacity implementation in RE sector

Allocation of Rs 160 billion for distribution + Rs 82 billion to promote RE

- Allocation of Rs. 160 billion for Reform-Linked Distribution Scheme and strengthening of power systems, higher by 67% over FY2023 RE
- Allocation of Rs. 82 billion to promote solar and wind capacity, including the KUSUM scheme, higher by 32% over FY2023 RE
- Increased allocation to distribution sector to aid the discoms in augmenting their infrastructure and improving operating efficiencies

PM-PRANAM – to promote alternative fertilizers

- PM PRANAM scheme to incentivise promotion of alternative fertilisers and balanced use of chemical fertilisers to achieve an optimal balance of (nitrogen, phosphorous and potassium (NPK) in the soil.
- Excessive use of urea (rich in N ingredient) has distorted the balance of NPK in soil in favour of N as reflected by NPK use ratio of 7.7 : 3.1 : 1 in 2021-22 as against the desirable ratio of 4 : 2 : 1
- The National Green Hydrogen Mission, in its first phase till 2025-26, plans to substitute imports of fossil fuel and fossil fuel-based feedstocks (natural gas and ammonia) used to produce fertilisers by encouraging the adoption of indigenous green ammonia-based fertilisers)



Schemes encouraging climate-conscious action by farmers, organisations and society

Green credit programme

- To encourage behavioural change, a Green Credit Programme will be notified under the Environment (Protection) Act.
- This will incentivise environmentally-sustainable and responsive action by companies, individuals and local bodies, and help mobilise additional resources for such activities.
- This is expected to encourage climate-conscious action from all to collectively reduce the carbon footprint.

Amrit Dharohar

The scheme will encourage optimal use of wetlands, and enhance bio-diversity, carbon stock, eco-tourism opportunities and income generation for local communities.

GOBARDhan scheme – Rs. 100 billion

- 500 new ‘waste to wealth’ plants under the GOBARDhan (Galvanizing Organic Bio-Agro Resources Dhan) scheme will be established. These will include:
 - 200 compressed bio-gas (CBG) plants, including 75 plants in urban areas
 - 300 community or cluster-based plants
- Mandate for introducing 5% CBG would promote its use
- Exemption of excise duty on blended CNG equal to the GST paid on biogas component would promote increased usage of the latter

Bhartiya Prakritik Khedi Bio-Input Resource Centres

- Over the next 3 years, Government will facilitate 1 crore farmers to adopt natural farming.
- For this, 10,000 Bio-Input Resource Centres will be set up, creating a national-level distributed micro-fertiliser and pesticide manufacturing network.

MISHTI

Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) will be taken up for mangrove plantation along the coastline and on salt pan lands, wherever feasible.

Coastal shipping, duty exemption, scrappage policy to help build green ecosystem



Coastal shipping

- The Budget has proposed promotion of coastal shipping for both passenger and freight segments through the PPP mode with viability gap funding
- Focus on coastal shipping is positive as it will boost its share in multi-modal mix and aid in better capacity utilisation of port assets



Vehicle replacement

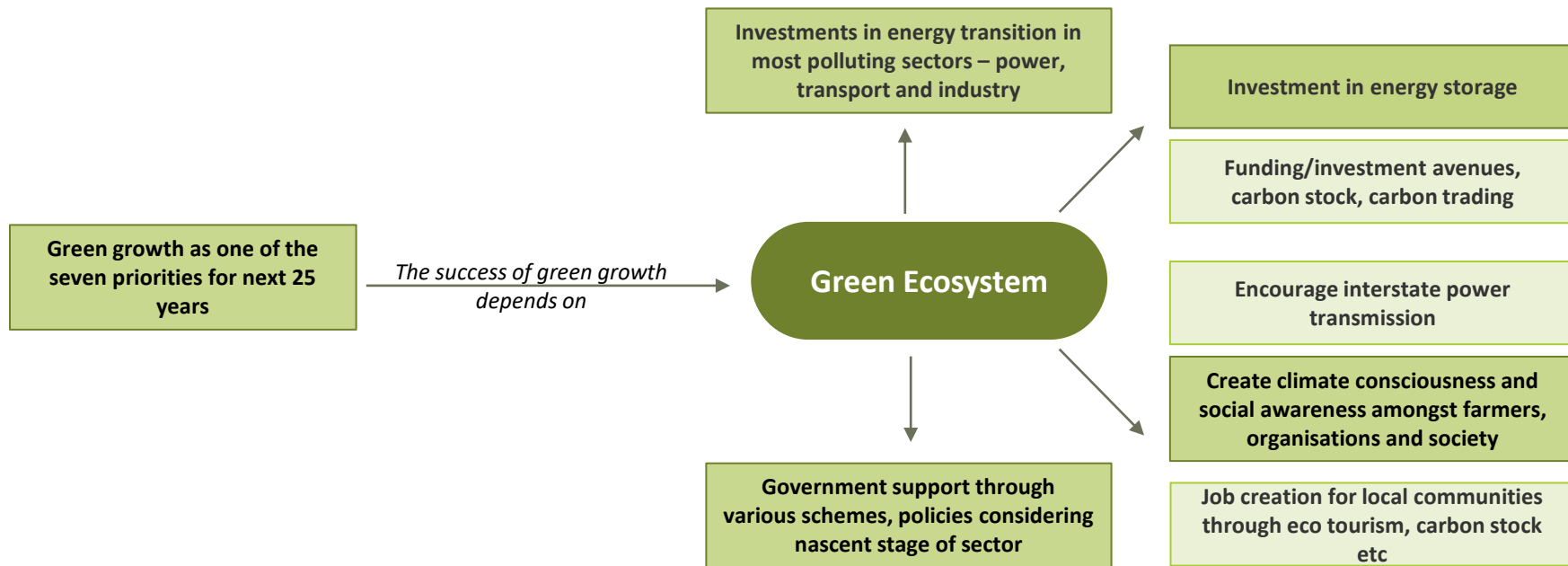
- Replacing old polluting vehicles is an important part of greening economy
- In keeping with the Vehicle Scrapping Policy mentioned in Budget 2021-22, funds are allocated to scrap old vehicles of the Central Government. States will also be supported in replacing old vehicles and ambulances
- The GoI's continued focus on replacing old polluting vehicles, as reflected in the fund allocation towards scrapping of old Central Government vehicles and extending interest-free loans to state governments for the same, is expected to spur replacement demand, especially for buses



Duty exemption

- Excise duty exemption on GST-paid compressed bio-gas contained in it
- Customs duty exemption extended to import of capital goods and machinery required for manufacture of lithium-ion cells for batteries used in electric vehicles

Green growth to help create green ecosystem, social awareness and climate consciousness along with funding and operational support



- Union Budget 2023-24 demonstrated India's resolve to actively drive energy transition and sustainable development
- India's focus on green transition is likely to remain at the core of future budgets as well



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