Landscape of Green Finance in India

September 11, 2020
A first-of-its-kind study presenting the most comprehensive information on green investments in India for FY 2017 and 2018.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Output</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Estimate total amount of green finance</td>
<td>• A comprehensive report</td>
<td>• Quantum and nature of public and private mitigation investments</td>
</tr>
<tr>
<td>• Identify data gaps, challenges and inconsistencies</td>
<td>• Sankey diagram</td>
<td>• Identification of data gaps and limitation</td>
</tr>
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<td></td>
<td>• Roadmap for creation of an online Measurement and Reporting portal</td>
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</tbody>
</table>
Scope and Methodology

- Timeframe: FY 2017 and FY 2018
- Sectors: Power Generation, Energy Efficiency and Power Transmission, Sustainable Transportation
- Instruments: Debt, Equity, Grants
- Scope of accounting: Disbursements as opposed to commitments
- Taxonomy: ‘Green Finance Taxonomy’ developed by CPI and cKinetics
- Methodology Document: Background paper
Sankey Diagram
LANDSCAPE OF GREEN FINANCE, FISCAL YEARS 2016-2018

SOURCES
- Government Budgets 26.4
- Public Sector Undertakings 44.8
- Multilateral (6) & Bilateral (19) DFIs 24.9
- Foreign Direct Invest 12.5
- Philanthropy 0.2
- Project Developers/ Corporates 29
- Commercial Banks 97
- Resid., Comm., & Inst. 13.2

INSTRUMENTS
- Equity 51.4
- Debt 134.8
- Unknown 34.8
- GIA* Budgetary Allocations 26.8
- Grants

SECTORS
- Power Generation 199.2
- Sustainable Transportation 27.8
- Power Transmission 20.6
- Energy Efficiency 4.1

SUB-SECTORS
- Other Mitigation-related Activities
- Solar 107.4
- Wind 61.4
- MRTS* 201.1
- EVs 7.4
- Policy Support and Research 8.6
- GEC* 9.6
- Smart Grid 2.9
- Retros 2.5
- Multiple Uses 27.7

All figures in thousand Crores

*Acronyms: GIA = Grants in Aid
MRTS = Mass Rapid Transit System
GEC = Green Energy Corridors
Sources - Domestic private finance actors contributed the largest share (56%) INR 139 thousand crores (USD 21 billion)

Breakdown of Sources of Finance by Origin and Channel of Delivery

*Philanthropy < 1%
Instruments - Debt, through project or corporate finance, was the largest financial instrument used to channel green finance, **INR 70 thousand crores/year (54%)**
Power Generation

Breakdown by sub-sector

- Solar: 54%
- Wind: 31%
- Multiple: 14%
- Policy support & research: 1%
- Hydro: 1%
- Other RE: 0%

Tariff, INR/Wp:

- Wind:
  - 2016-Q4: 4.81
  - 2017-Q1: 4.78
  - 2017-Q2: 3.46
  - 2017-Q3: 3.42
  - 2017-Q4: 2.62
  - 2017-Q4: 2.43

- Solar:
  - 2016-Q4: 4.81
  - 2017-Q1: 4.78
  - 2017-Q2: 3.46
  - 2017-Q3: 3.42
  - 2017-Q4: 2.62
  - 2017-Q4: 2.43

Basic points:

- 2014 & 2015:
  - 2014: 250
  - 2015: 225

- 2016:
  - 2016: 225

- 2017 & 2018:
  - 2017: 175
  - 2018: 150
  - 2018: 125
Power Transmission and Energy Efficiency

Key role of Public Sector Undertakings: ~34%*

Breakdown by Sub-sector
Power Transmission and Energy Efficiency

Key role of Public Sector Undertakings: ~34%*

Breakdown by Source of Finance
Sustainable Transportation
Nascent industry in FY 17&18 led by 3-wheeler (rickshaw) sales and MRTS investments

Low-carbon transport constituted 12% of total tracked green investments, totaling to INR 27.50 thousand crores.
Observations and next steps
Data Gaps and Limitations

- Non-availability of **data on disbursements**
- Lack of harmonized **green taxonomy**
- **Non-standardised reporting** and non-financial disclosure policy
- Variations in **format** and categorization of inter-state data
Next Steps

- **Coverage Expansion**: Inclusion of adaptation/LULUCF
- **Improved Collaboration**: building relationships with government agencies, data providers, and other stakeholders
- **Online portal**: to present the measurement and reporting of data and user-friendly visualization
- **Designing domestic climate budget tagging framework**: similar to gender budgeting

**Steps to CBT development:**

- Identify existing PFM parameters
- Set framework to identify climate change expenditure
- Define weighting methodology
- Determine how climate change expenditure will be identified **in the PFM system**
- Design tagging procedure and reporting format
# Climate Budget Tagging and Monitoring/Reporting System

## Tamil Nadu Annual State Budget

### Demand 14 Energy Department

<table>
<thead>
<tr>
<th>Summary</th>
<th>Rupees in Thousands</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>2810 New and Renewable Energy</td>
<td></td>
</tr>
<tr>
<td>02 Solar</td>
<td></td>
</tr>
<tr>
<td>800 Other Expenditure</td>
<td></td>
</tr>
<tr>
<td>State's Expenditure</td>
<td>...</td>
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<tr>
<td>Total Sub Major Head 2810 02</td>
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<tr>
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<tr>
<td>Total Major Head 2810</td>
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<td>...</td>
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<tr>
<td>Total Net Major Head 2810</td>
<td></td>
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<tr>
<td>Add - Recoveries</td>
<td></td>
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<tr>
<td>Total Gross Major Head 2810</td>
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</tbody>
</table>

Tamil Nadu Annual State Budget
Climate Budget Tagging and Monitoring/Reporting System

APPENDIX XXII
(See Paragraph 14.6)
FORMAT FOR FURNISHING INFORMATION ON ‘GENDER BUDGETING’
(i) 100% provision towards women

<table>
<thead>
<tr>
<th>Demand No : ............</th>
<th>Name of the Ministry/Department : .........................</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>₹ in crores</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Details of Scheme</th>
<th>BE 2016-17</th>
<th>RE 2016-17</th>
<th>BE 2017-18</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Plan</td>
<td>Non Plan</td>
<td>Total</td>
</tr>
<tr>
<td></td>
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(ii) Pro-women (at least 30% of provision)

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Note: Two separate statements in the format prescribed above may be furnished

Director (Budget)/Deputy Secretary (Budget)
Ministry/Department ................................
Tel. No. ...........................................

To:
Shri T. Uthaya Kumar
Additional Budget Officer, Ministry of Finance,
Department of Economic Affairs, North Block, New Delhi
Contact –

CPI: climatepolicyinitiative.org
The Lab: climatefinancelab.org
USICEF: usicef.org
Global Landscape of Climate Finance: climatefinancelandscape.org

@climatepolicy
@climatepolicyinitiative

Thank You

Jolly Sinha | Shreyans Jain | Rajashree Padmanabhi