



CDM and NAMA in India

looking back (1) and looking forward (2)

Mumbai, 8th of October 2014

Enrico Rubertus
Project Director GIZ
New Delhi



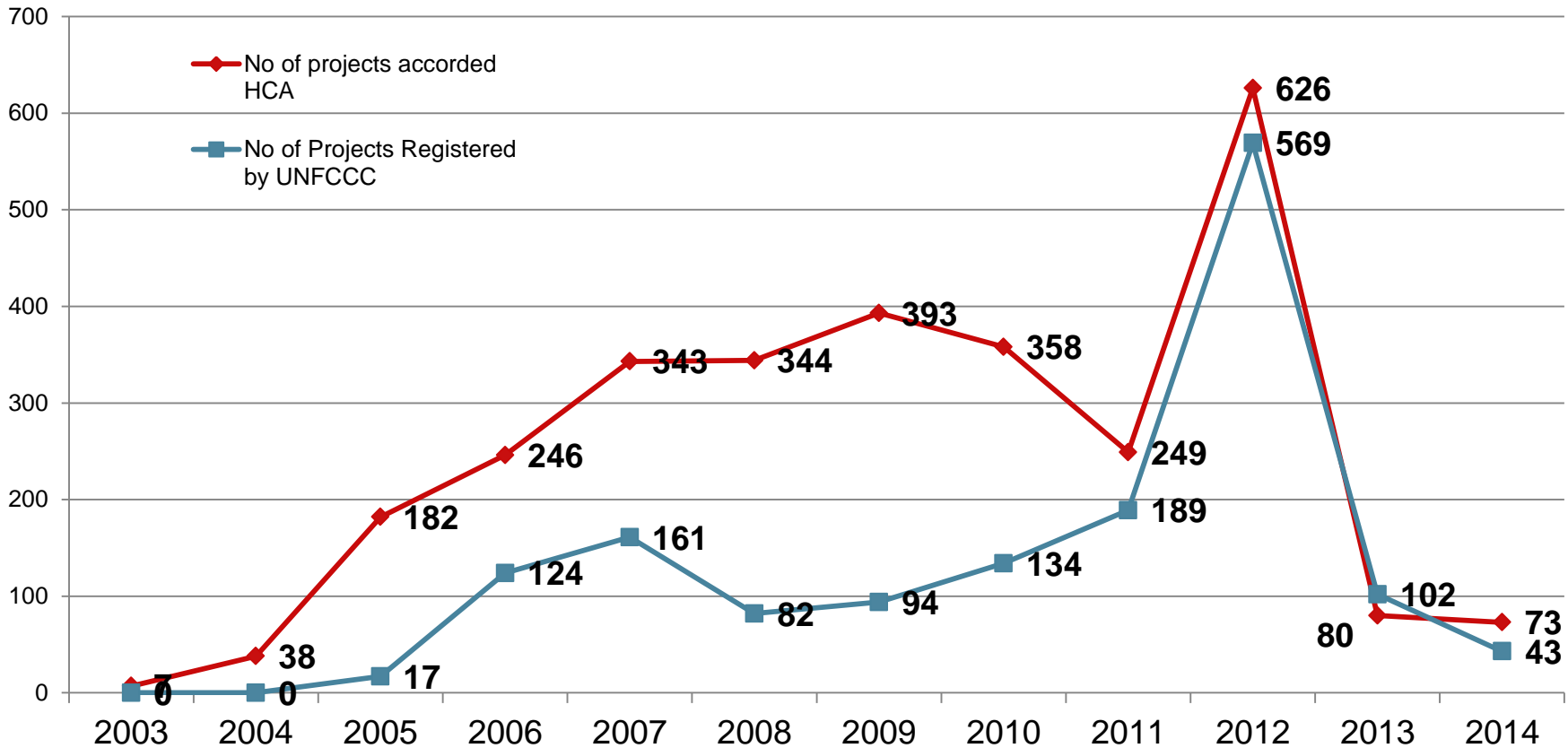
Background

- The first commitment period of Kyoto Protocol has ended – right time to review and assess the future options
- HCA given by MoEF on the basis of PDD – demonstrating that the proposed project meets the Sustainable Development criteria
- However, lack of information on SD impacts; no study exists with primary data
- Conflicting opinions on Sustainable Development Impact of CDM

MoEF requested GIZ to conduct the Study on Impacts of CDM and future scenarios



Number of HCA and UNFCCC registration India/ Year (October 2014)



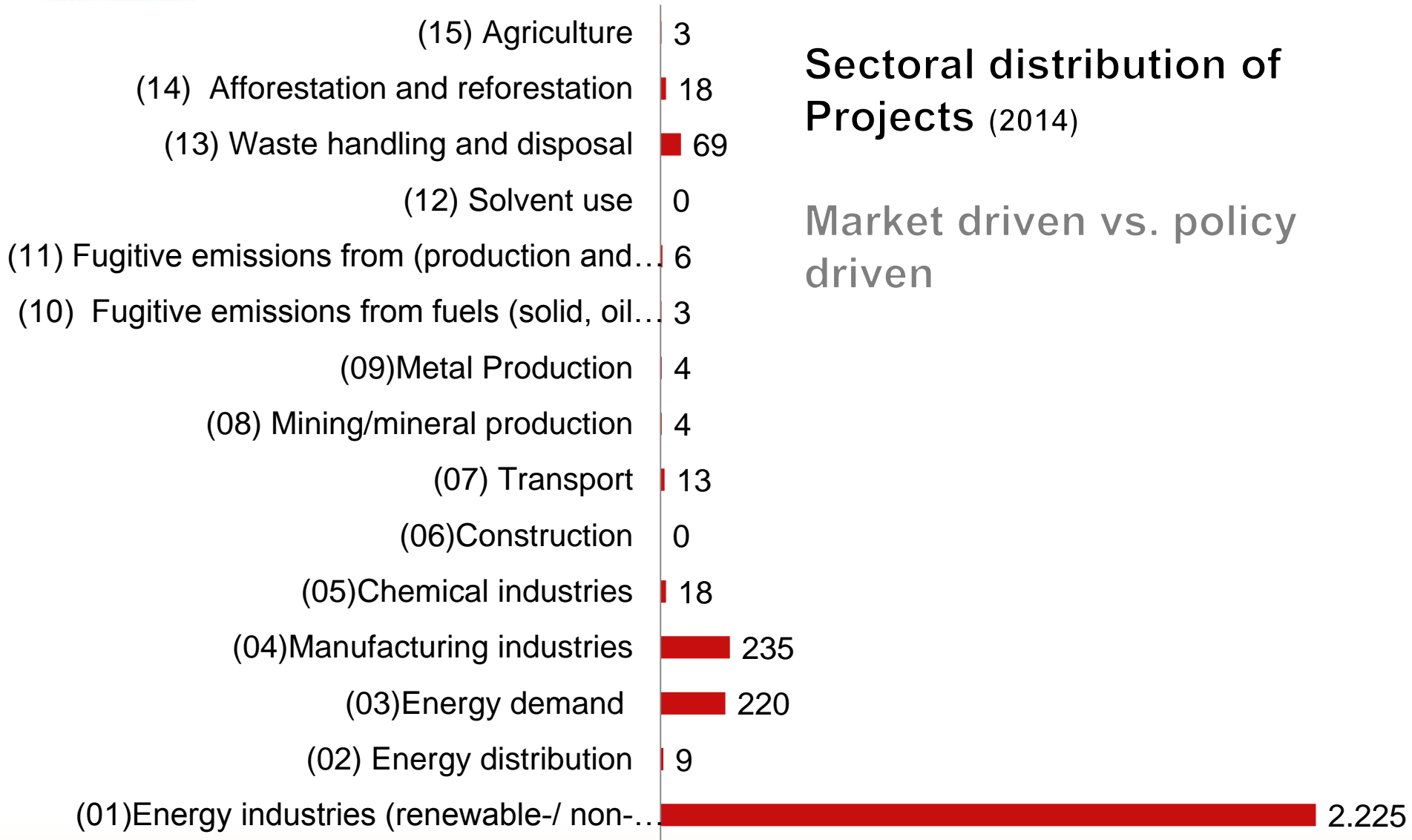
Total HCA: 2938 Projects
Total UNFCCC: 1528 Projects

Approx. INR 160,000 Cr Investment
Approx. CER 196 Million generated



Sectoral distribution of Projects (2014)

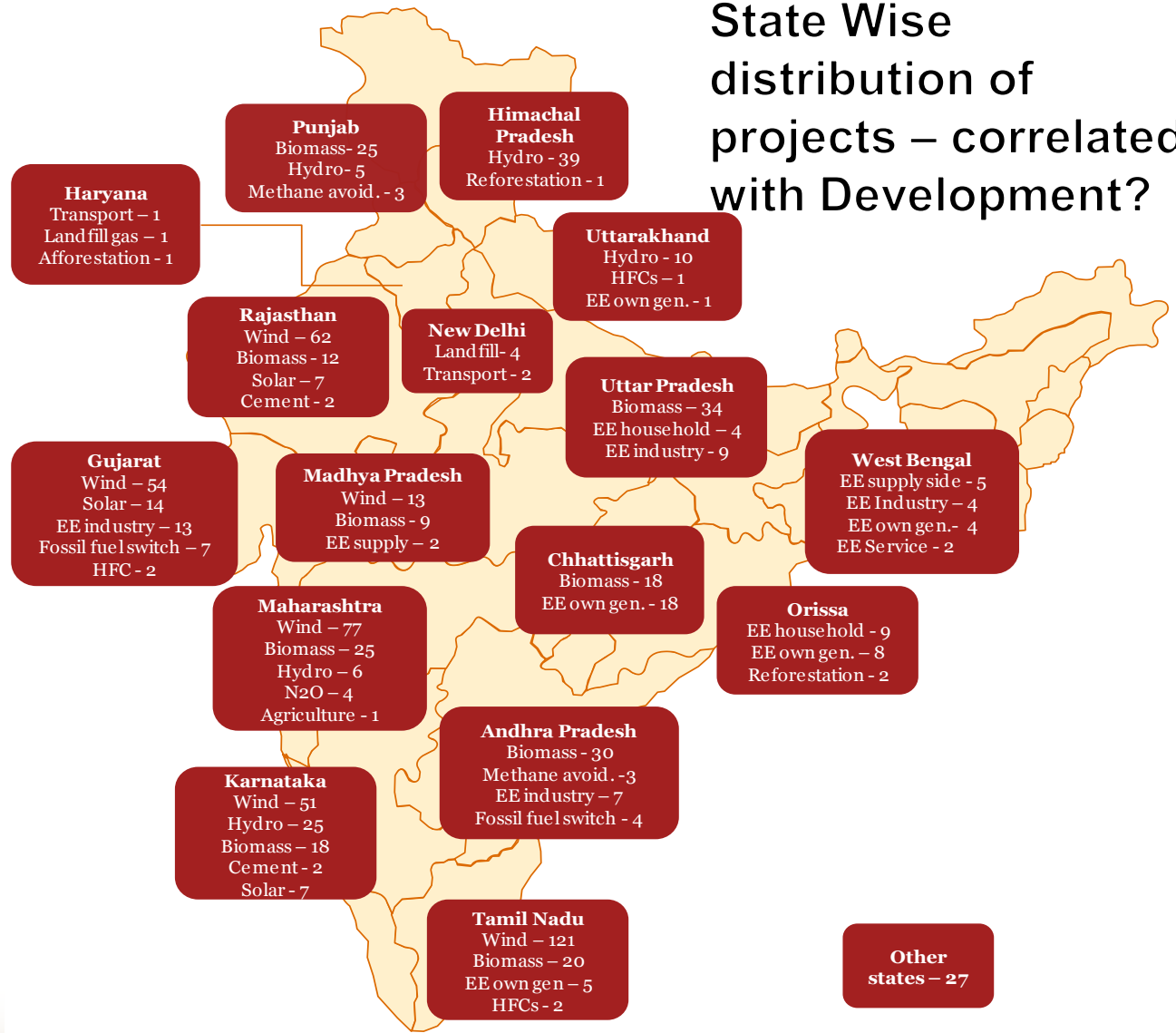
Market driven vs. policy
driven





State Wise distribution of projects – correlated with Development?

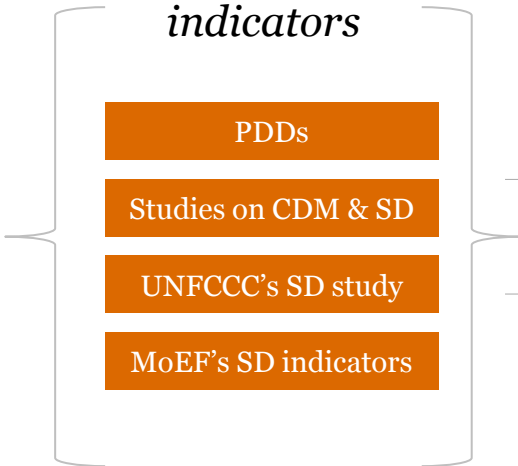
State	Investment in CDM projects (INR million)
Gujarat	2,62,427
AP	2,32,376
Maharashtra	1,81,016
HP	1,67,858
MP	1,57,034
Tamil Nadu	1,41,966
Karnataka	1,07,870
Delhi	1,05,080
Rajasthan	76,744
Uttarakhand	47,572
Multistate	37,959
Jharkhand	25,739
Sikkim	25,256
Uttar Pradesh	20,392
J&K	12,323
Punjab	11,211
Orissa	9,468
Haryana	6,689
West Bengal	4,294
Bihar	2,007
Kerala	1,632
Goa	1,272



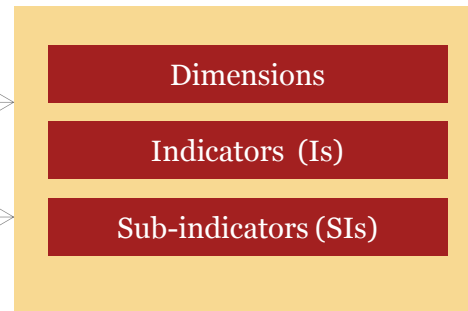


Process of assessment

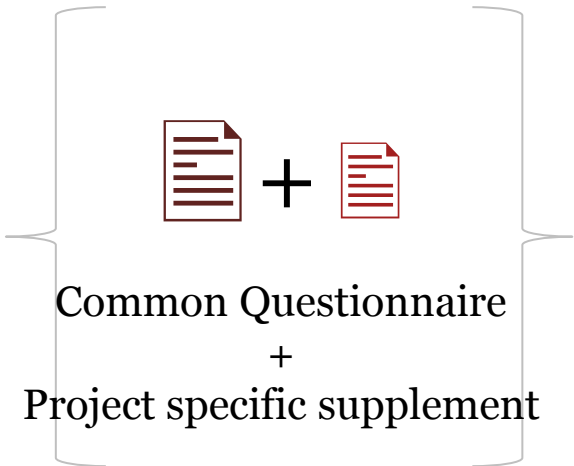
Identification of sustainable development indicators



Sustainable development Indicators for the study



Questionnaire



Questionnaire disbursed to all project proponents (737 projects registered till 31 July 2011)



Sustainable development indicators

(as per MoEF and UNFCCC Guidelines)

Dimension	Indicator
Economic (20)	Direct/indirect financial benefit for the local and/or regional economy
	Local/regional jobs generated directly/indirectly
	Investment in the local/regional infrastructure
Environment (32)	Efficient utilization of natural resources
	Reduction in noise, odors, dust or pollutants
	Improvement and/ or protection of natural resources
	Available utilities (supplying more or making use of less energy)
	Promotion of renewable energy
Social (12)	Labour conditions and/or human rights
	Promotion of education
	Health and Safety
	Poverty Alleviation
	Engagement of local population
	Empowerment of women, care of children & frail
Technological (4)	Adoption of new local/imported technology



Categorization of SD benefits

Intrinsic Benefits: The sustainable development benefits from projects that occur due to the inherent nature of the activity.

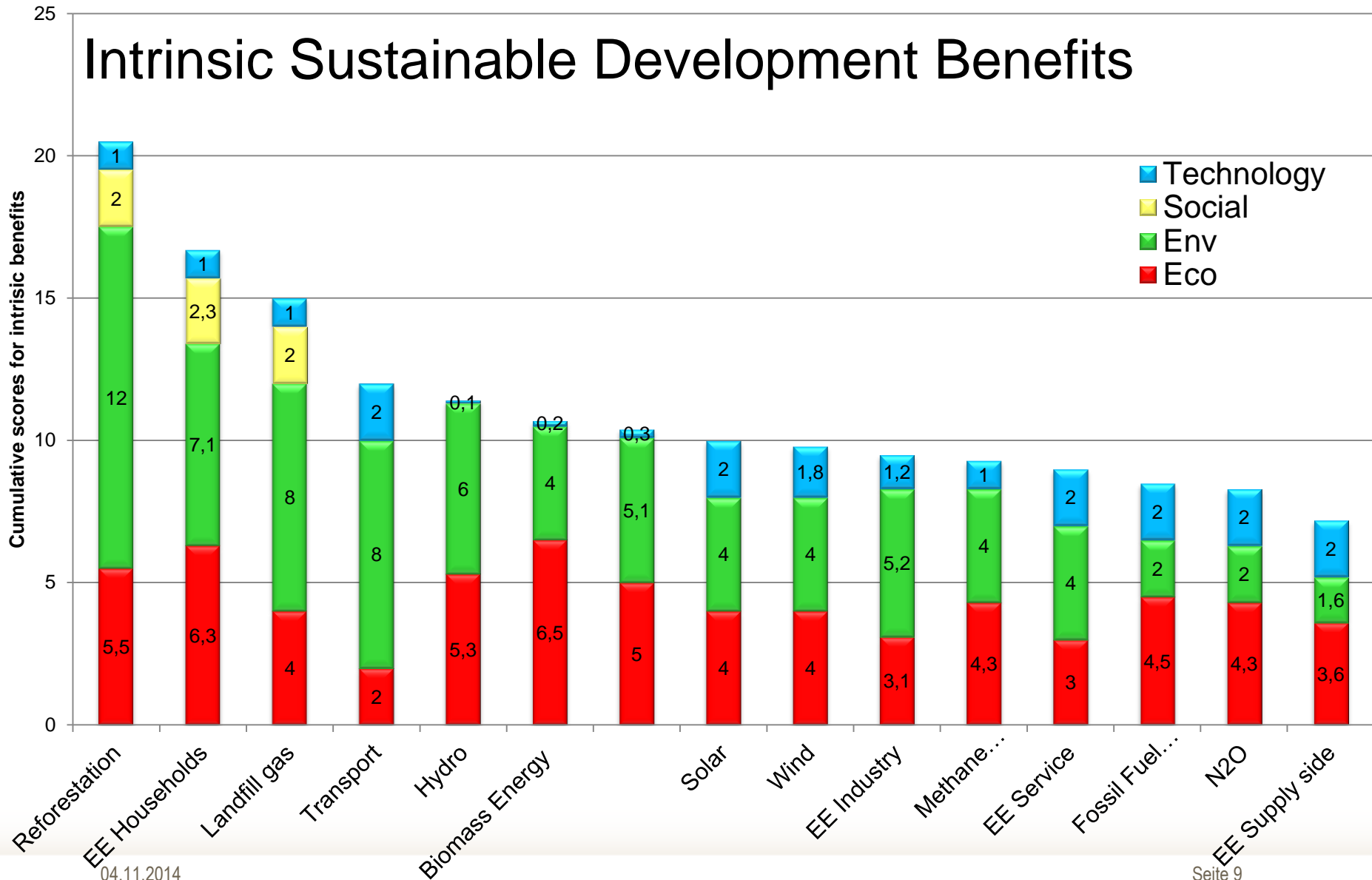
Secondary Benefits: The sustainable development benefits due to community development activities undertaken by the project proponent in the vicinity of the project.

Example to illustrate the categorization

Type of project	Intrinsic benefits	Secondary benefits
Wind energy project	<ul style="list-style-type: none"> Promotion of renewable energy (Environment) Creation of jobs for the project activity (Economic) 	<ul style="list-style-type: none"> Building of hospitals or schools for communities (Economic and Social) Conducting health camp in local areas (Social)
Efficient cook stoves project	<ul style="list-style-type: none"> Health benefits due to reduction of smoke (Social) Reduced drudgery on women as they need not walk to far away areas for fuel wood (Social) 	<ul style="list-style-type: none"> Supporting education for women (Social) Conducting community health check-ups over and above the project (Social)

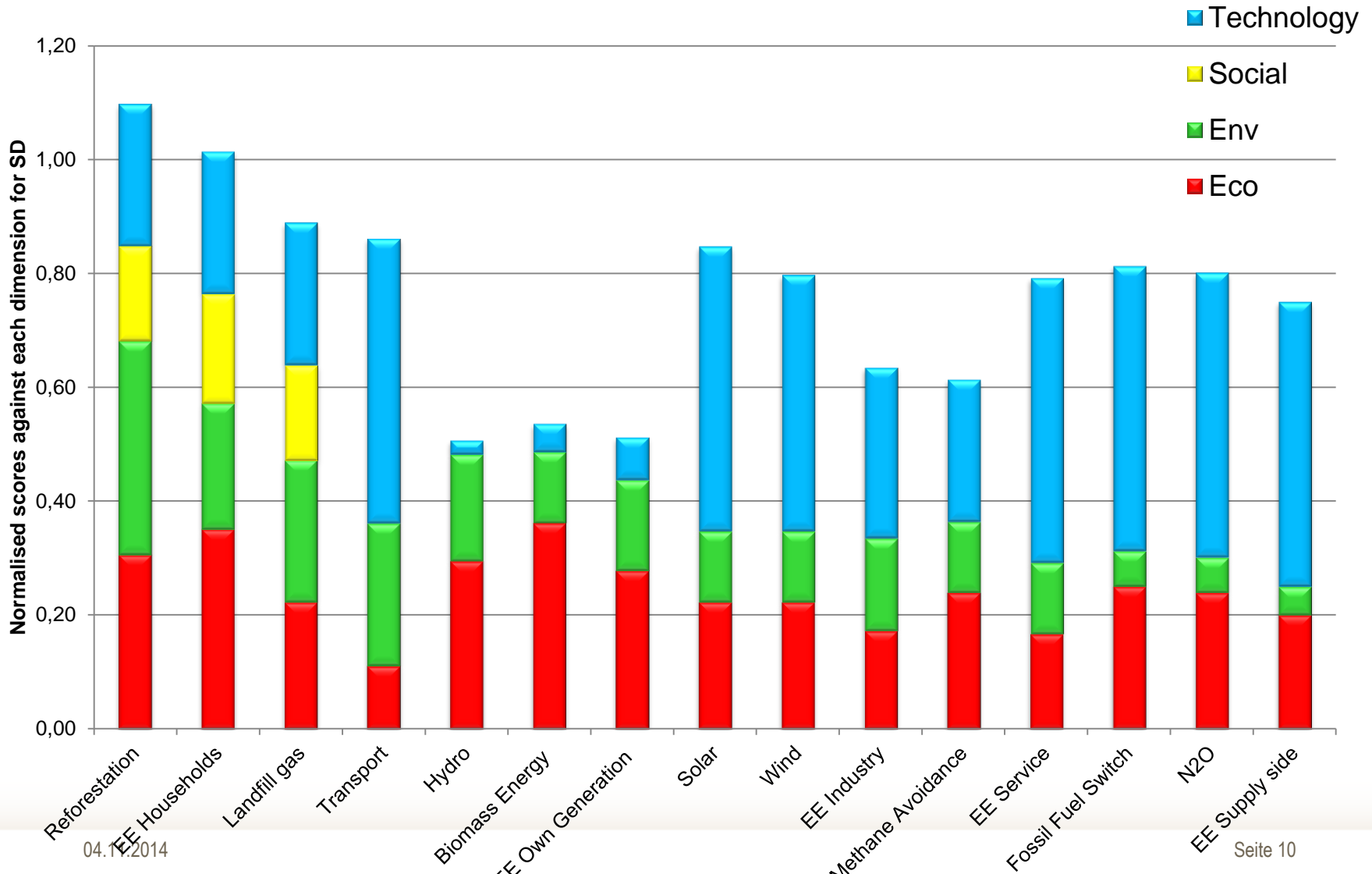


Intrinsic Sustainable Development Benefits





SD after normalizing scores against each dimension



- ***Framework for SD impact reporting for future actions***
 - SD impact monitoring system for future actions (first step MIS)
 - Mandate the projects to spend the 2% of their CER revenues SD projects
 - Best practices for individual sector projects should be made available
- ***Constitute a high level advisory group for policy advice on e.g. SD Impact, Equity, Loss and Damage, etc***
- ***Develop domestic emission trading scheme***
 - Domestic trading schemes for priority sectors / priority projects
 - The scheme could be supported by corporates who wish to voluntary off set their emissions or supported by the CSR funds or by GoI with National Clean Energy Fund
- ***Develop NAMAs building upon existing mitigation schemes while making use of CDM experience***
 - Analyse existing schemes, develop national NAMA framework and selection criteria, make use of the CDM experience



Looking Forward

Nationally Appropriate Mitigation Actions (NAMA)



Indo-German Technical Cooperation project: **Supporting the Development and Management of NAMA in India**

Indian Partner: Ministry of Environment, Forests and Climate Change, Time period: 09. 2013 – 08. 2017 (4 Years) Budget: 3 Mio Euros

The Indian Government has started using NAMAs as a potential mechanism for GHG mitigation and a NAMA cell in the Ministry of Environment and Forests provides technical support to relevant stakeholders.

Component I

**Development NAMA in
Waste and Forest
Sector**

Component II

**Development of MRV
System for the NAMA**

Component III

**MoEF NAMA Cell
support**

**Cross Cutting: Stakeholder involvement for long term sustainability
Capacity building and facilitation of private sector cooperation**



Nationally Appropriate Mitigation Actions – NAMA

Concept created in the Bali Action Plan (2007) at COP13 to denote [voluntary] mitigation actions by developing countries after 2012

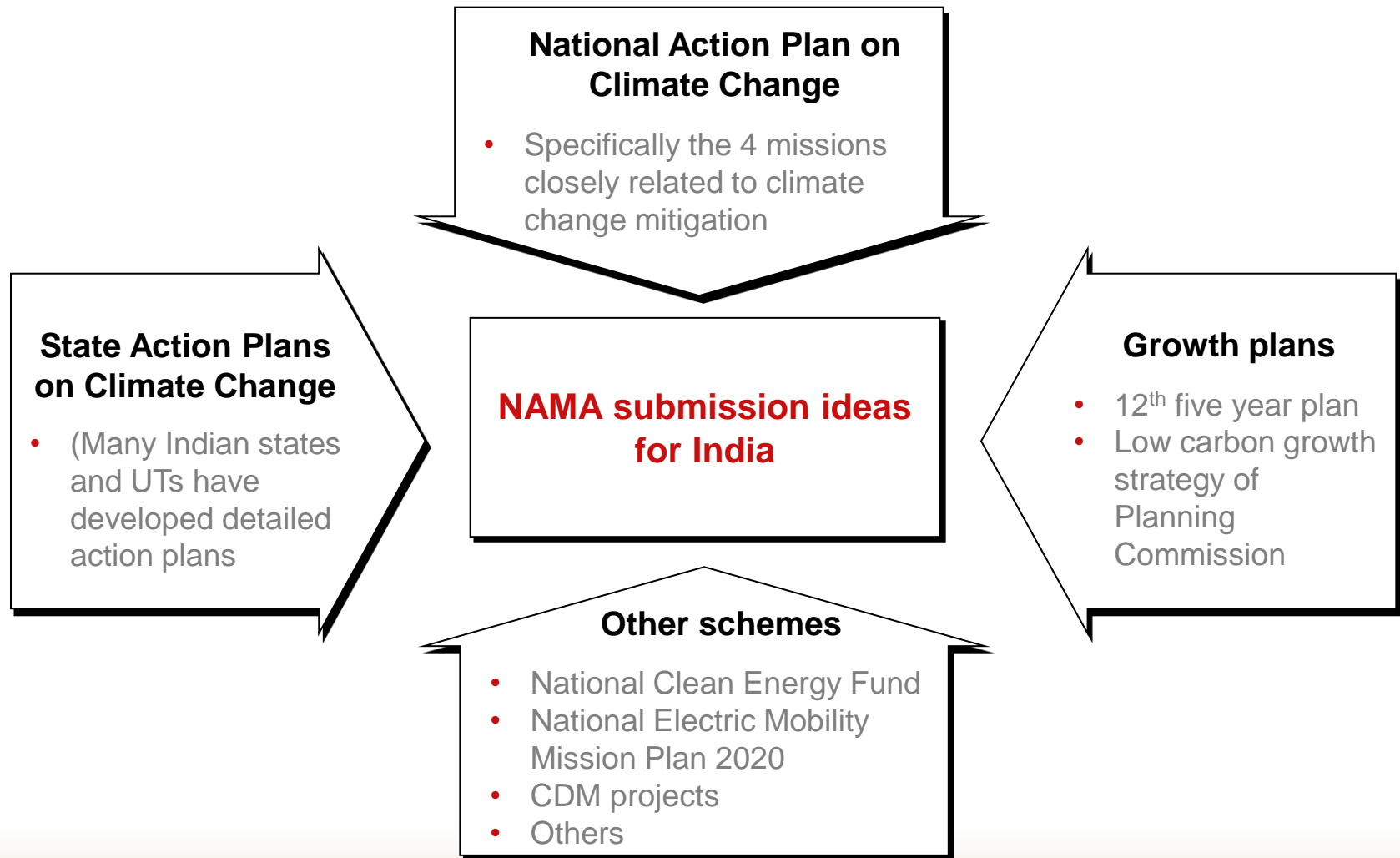
*“**Nationally appropriate** mitigation actions’ by developing country Parties in the context of **sustainable development**, **supported** and enabled by technology, financing and capacity building, in a **measurable, reportable and verifiable** manner.”*

Categories:

- Unilateral/ domestic
- Supported
- Credited
- Mixed/ hybrid








Identifying NAMAs from domestic policies





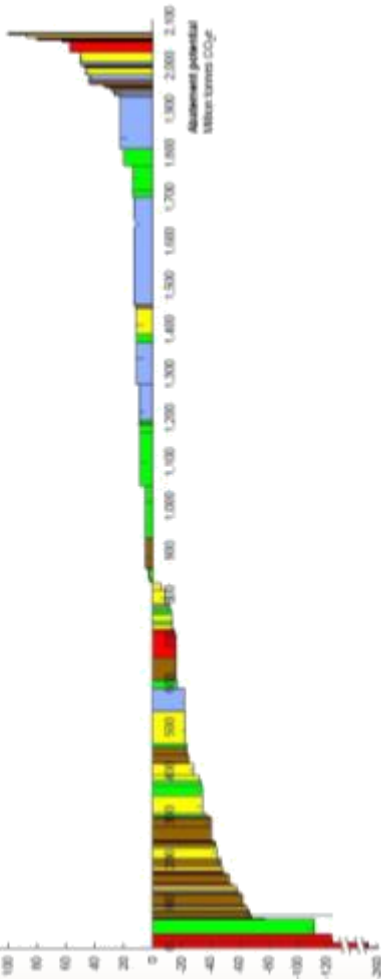
Summary of potential NAMAs (selected few)

Sectors	NAMA title	Source/ scheme
Power 	<ul style="list-style-type: none"> • Jawaharlal Nehru National Solar Mission • National Tariff Policy • National Clean Energy Fund • National Wind Energy Mission • Super efficient equipment program 	<ul style="list-style-type: none"> • National Action Plan on Climate Change • Electricity Act • Ad-hoc scheme; through coal cess • Proposed in 12th 5 year plan • Proposed in 12th 5 year plan
Forestry 	<ul style="list-style-type: none"> • National Mission for a Green India • Compensatory Afforestation Fund • Carbon credit programme for afforestation 	<ul style="list-style-type: none"> • National Action Plan on Climate Change • Ad-hoc scheme • Proposed in 12th 5 year plan
Industry 	<ul style="list-style-type: none"> • PAT scheme, NMEEE • Market transformation for Energy Efficiency • Energy efficiency financing scheme • Framework for EE Economic Development 	<ul style="list-style-type: none"> • All four through National Action Plan on Climate Change
Transport 	<ul style="list-style-type: none"> • National Electric Mobility Mission Plan 2020 • Vehicle fuel efficiency scheme • Improving efficiency of freight transport • Mass transport projects 	<ul style="list-style-type: none"> • Ad-hoc mission by Dept. of Heavy Industries • Program proposed by BEE • Started implementation through 11th 5 yr plan • Ad-hoc schemes (JNNURM, metro rail, etc.)
Buildings 	<ul style="list-style-type: none"> • National Mission for Sustainable Habitat • Green building codes 	<ul style="list-style-type: none"> • National Action Plan on Climate Change • Ad-hoc programs by various agencies



Sustainable development potential of identified NAMAs

Abatement cost

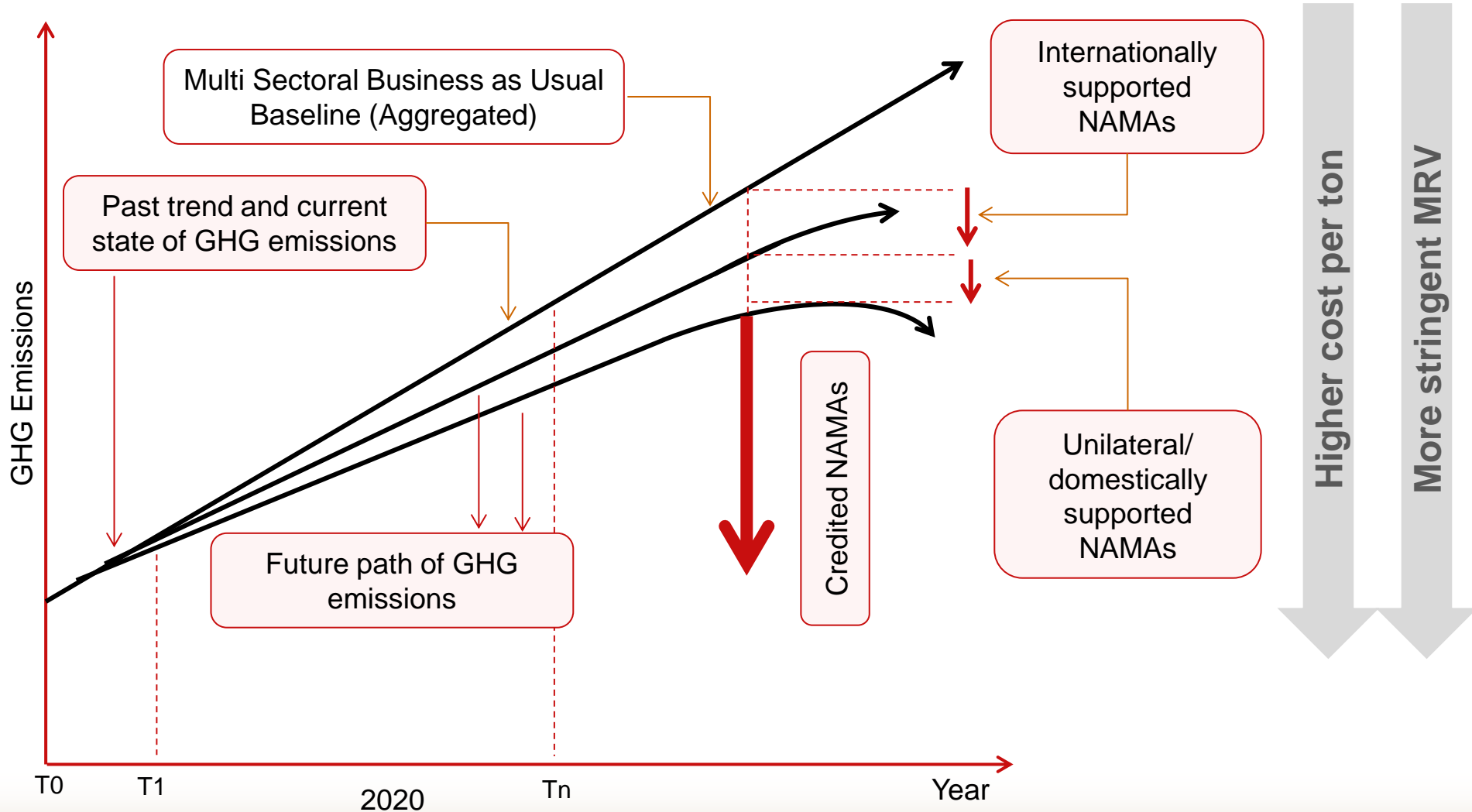


Sustainable development potential

NAMA	Social	Eco	Env	Tech
Jawaharlal Nehru National Solar Mission	●	●	●	●
National Tariff Policy	■	●	●	●
National Clean Energy Fund	■	●	●	●
National Wind Energy Mission	◐	●	●	●
Super efficient equipment program	●	●	●	●
National Mission for a Green India	●	●	●	■
Compensatory Afforestation Fund	●	●	●	■
Carbon credit programme for afforestation	●	●	●	■
PAT scheme, NMEEE	■	●	●	●
Market transformation for Energy Efficiency	●	●	●	●
Energy efficiency financing scheme	■	●	●	●
Framework for EE Economic Development	■	●	●	●
National Electric Mobility Mission Plan 2020	●	●	◐	●
Vehicle fuel efficiency scheme	●	●	●	●
Improving efficiency of freight transport	●	●	●	●
Mass transport projects	●	●	●	●
National Mission for Sustainable Habitat	●	●	●	●
Green building codes	●	●	●	●

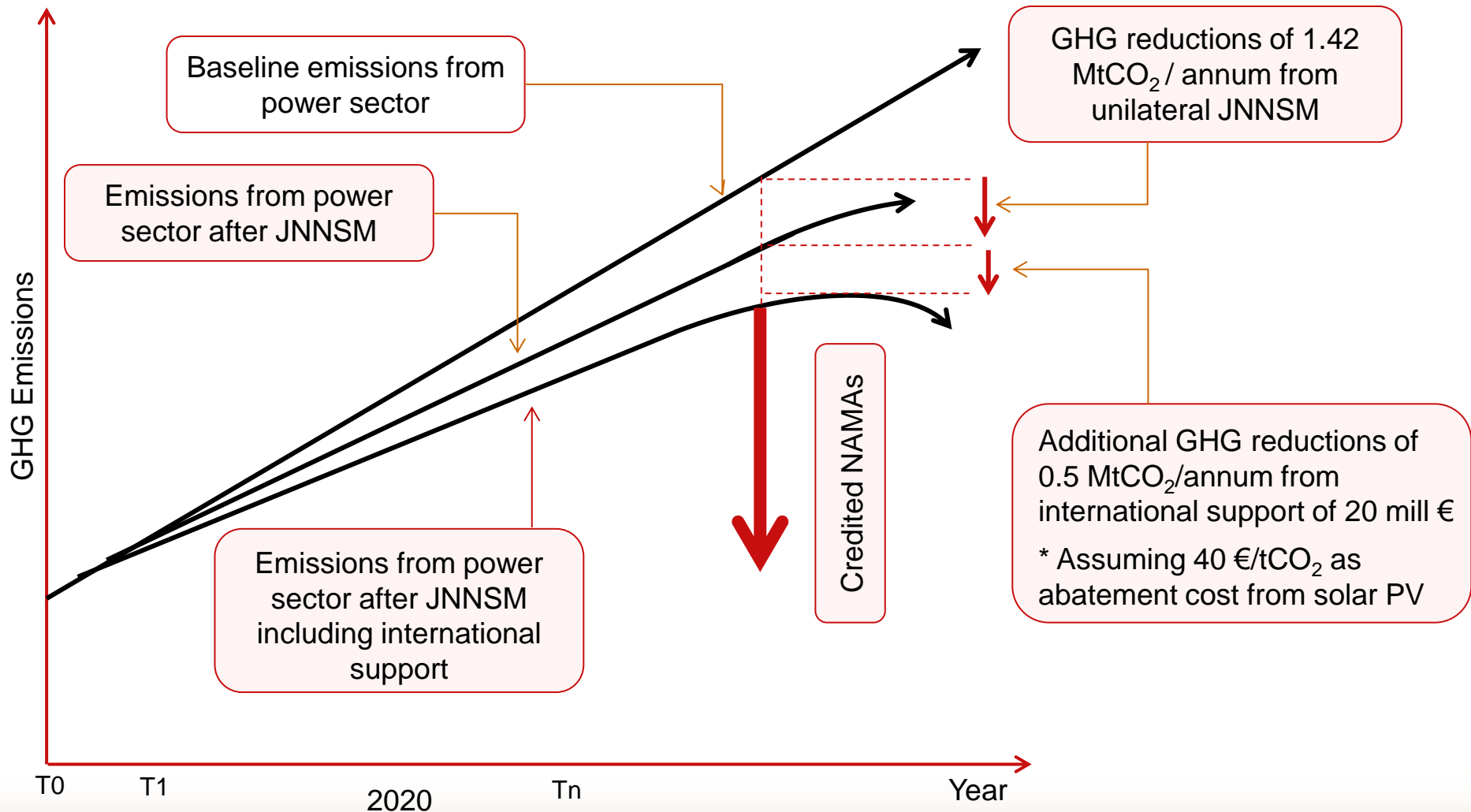


Another way to look at NAMAs





JNNSM in case of international support

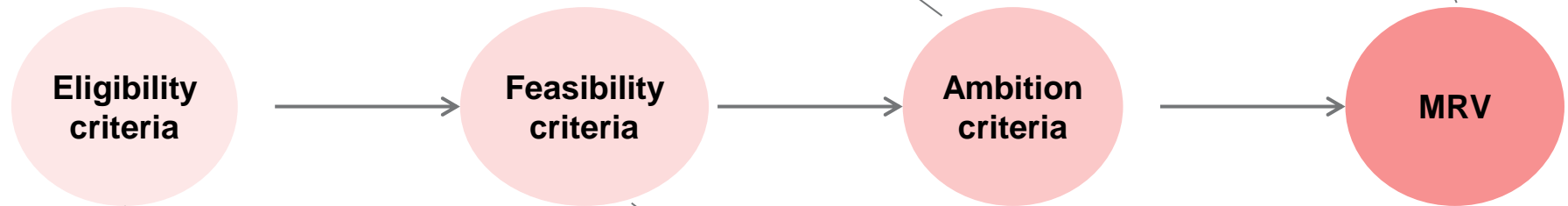




Possible selection criteria for NAMAs

- Sustainable development co-benefits – economic, environmental, social, technological and improvements in institutional arrangement
- Potential for additional GHG mitigation
- Leverage potential/ financial ambition
- Sectoral transformation
- Regional transformation

- Key performance indicators
- Monitoring methodology
- Institutional arrangement
- Reporting schedule
- Verification methodology
- Alignment with international verification requirements



Eligibility criteria

Feasibility criteria

Ambition criteria

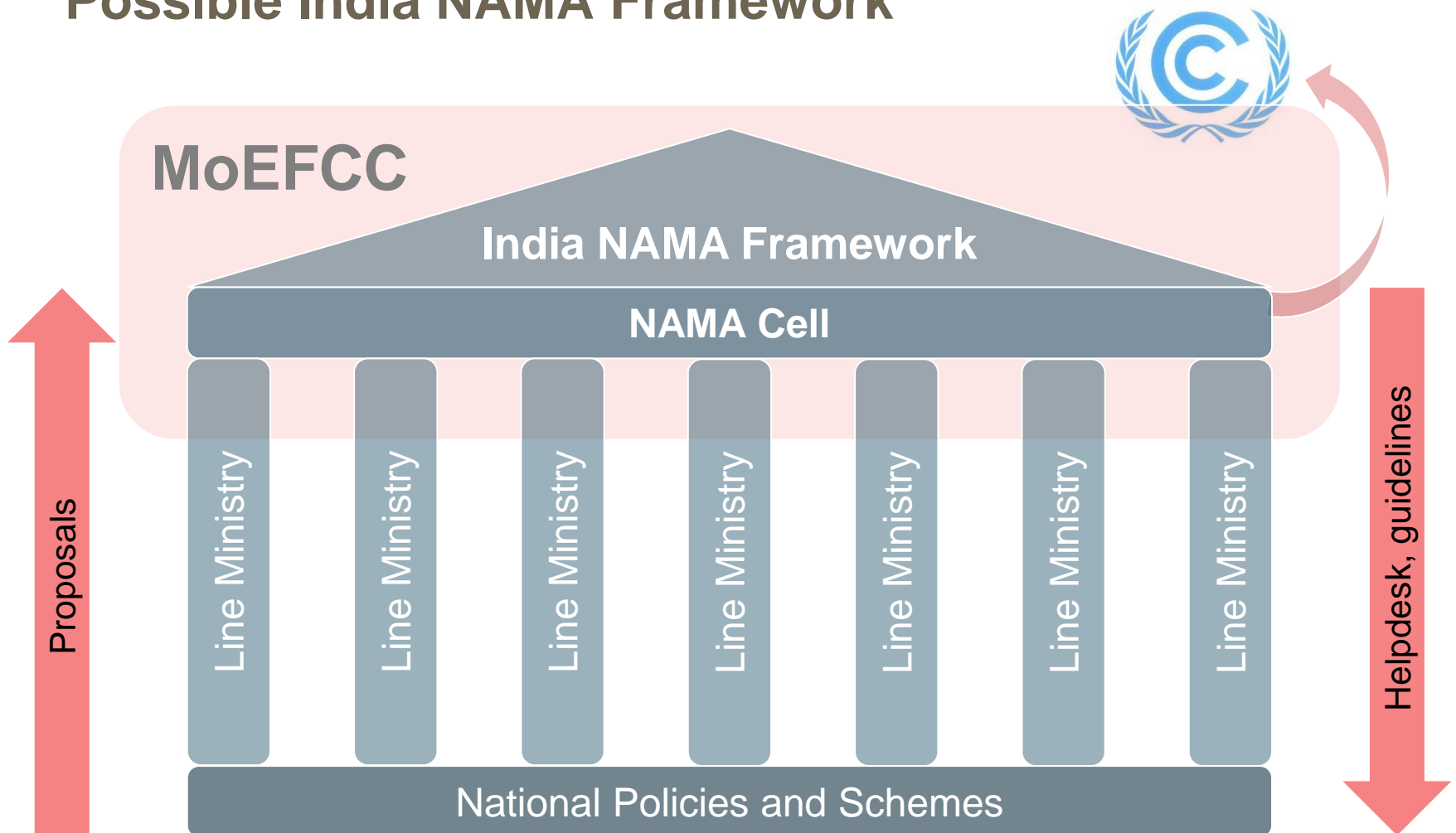
MRV

- NAMA title, type
- NAMA proponent & supporter
- Host country support
- Duration
- Sector (to be selected from list)
- Technology
- Geographical reach & national appropriateness
- Mitigation potential
- Support requested – financial, technological, capacity building

- NAMA concept and rationale
- Institutional policies & regulatory frameworks
- Stakeholder involvement
- Starting situation
- Implementation methodology, NAMA outputs & outcomes
- Current state of implementation
- beneficiaries
- Barriers & risks
- Financial resources, funding status and sources



Possible India NAMA Framework





Thank you!

Contact

Enrico Rubertus

Project Director

Development and Management of Nationally
Appropriate Mitigation Actions (NAMAs) in India

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

B-5/2, Safdarjung Enclave

New Delhi 110029

enrico.rubertus@giz.de