

The Indo-German Energy Forum

Linkages to the NHB Programme and the EE Sector

Content

- » Aim and structure of the Indo-German Energy Forum

- » Energy efficiency in buildings project examples
 - » 1. Demonstration of Trigeneration Technology
 - » 2. Energy Performance Assessment Tool

- » Opportunities for the private sector

Indo-German Energy Forum

Established in 2006 by Indian Prime Minister Dr Manmohan Singh and German Chancellor Dr Angela Merkel in order to promote an energy dialogue with the aim of intensifying and deepening Indo-German co-operation in the areas of:

- » Energy security
- » Energy efficiency (EE)
- » Renewable energy (RE)
- » Investment in energy projects
- » Collaborative research and development



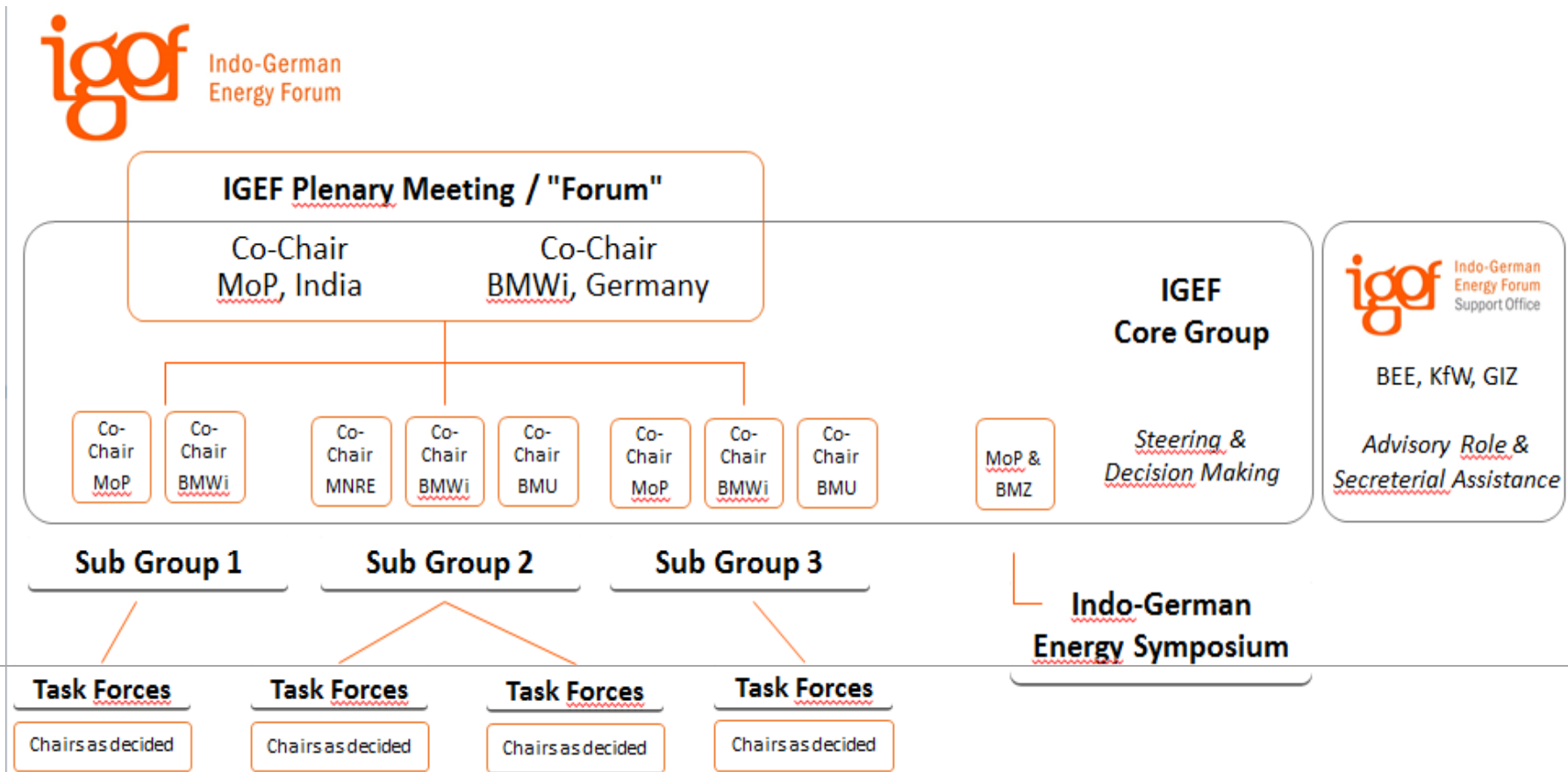
Connecting policy makers and industry

- » Expert dialogue between decision-makers in government and industry on
 - » sustainable energy supply and energy use
 - » development of markets for efficient thermal power plant technologies, energy efficiency and renewable energies and
 - » reduction of technical and market barriers



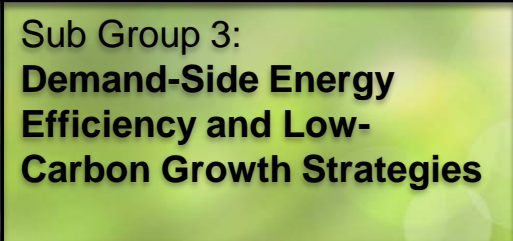
- » Support of strategic private-sector activities such as:
 - » pilot and demonstration projects
 - » collaborative projects involving Indian and German private business



IGEF Structure



IGEF Platform and Projects

Indo-German Energy Forum		
<p>Sub Group 1: Efficiency Enhancement in Fossil Fuel Based Power Plants</p> 	<p>Sub Group 2: Renewable Energies</p> 	<p>Sub Group 3: Demand-Side Energy Efficiency and Low-Carbon Growth Strategies</p> 
Task Forces & Projects initiated by the private sector with support of the IGEF		
<ul style="list-style-type: none"> • Harmonization of Tender Documents for R&M of Thermal Power Plants • Establishment of the „EEC for Indian Power Sector“ 	<ul style="list-style-type: none"> • Solar Guidelines - Roadmap to project implementation under the JNN Solar Mission • Pilot 3 Rooftop Solar PV Project 	<ul style="list-style-type: none"> • Demonstration project - Trigenration Plant • Task Force - Development of an Energy Performance Assessment Tool for Buildings
Indo-German Energy Symposium		

IGEF-Support Office

IGEF Stakeholders

» Government of India and Government of Germany



» Industry associations, research institutes, technology providers, project developers, investors...

National Thermal Power Cooperation (NTPC), Bureau of Indian Standards (BIS), National Bank for Agriculture and Rural Development (NABARD), Solar Energy Corporation of India (SECI), Confederation of Indian Industry (CII), Federation of Indian Chamber of Commerce and Industry (FICCI), Knauf, Hitachi, Abengoa, DESI Power, Ecolutions, EnviTec, Fraunhofer ISI, Gerindtec, German Commission for Electrical, Electronic & Information Technologies (DKE), German Solar Industry Association (BSW), IBC Solar, juwi, Local Governments for Sustainability (ICLEI), Moserbaer, Reliance Power Ltd., SMA, The Energy and Resource Institute (TERI), The Renewable Academy (RENAC), Q-cells...

Example: Task Force „Assessment of Energy Performance of Buildings“

- » 2009: Agreement to cooperate on projects that promote energy efficiency in buildings under Indo-German financial cooperation
 - » *Promotional Programme for Energy Efficient New Residential Housing in India* by NHB and KfW
 - » Incentivising Energy Efficiency in New Residential Buildings through concessional loans
 - » Feasibility study of promotional programme confirmed significant market potential for energy efficient residential buildings
 - » Target: Energy Savings > 30% compared to typical building without energy efficiency features

- » Need for an energy performance assessment tool for certification of energy saving potentials
 - » Robust tool, yet easy to use by broad range of professionals
 - » Fraunhofer building energy performance assessment tool used in Germany

Assessment of Energy Performance of Buildings

- » Adaptation of the tool to the Indian context by Fraunhofer IBP & The Energy and Resource Institute (TERI)
 - » Whole building approach > results driven
 - » Calculates projected energy demand & compares to base case
 - » Contains Energy Performance Parameters: HVAC, Hot water, Lighting, building materials and building architecture
 - » Evaluates impact of each energy conservation measure

- » Sharing of international experience
 - » on promotion of energy efficiency & linking assessment tool to energy efficiency labeling and loan schemes
 - » Discuss ways to deploy the software in the Indian industry

- » Download under: <http://www.ittoolkitindia.com/>

Opportunities for IGEF Stakeholders

- » Information on latest policy and technology developments
 - » Sub group meetings
 - » Workshops
 - » Market potential & feasibility studies

- » Networking opportunities
 - » Meet relevant stakeholders from industry, research organisations and policy makers from Germany and India

- » Support in setting up task forces and cooperation project
 - » Proposals submitted to the Support Office

IGEF Support Office - First Point of Contact

- » Jointly operated by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), German Development Bank (KfW) and the Indian Bureau of Energy Efficiency (BEE)
- » Liaison function to all interested stakeholders of the IGEF
- » Visit www.energyforum.in to receive the IGEF newsletter and further information

▶ New Delhi

Indo-German Energy Forum (IGEF)
c/o Deutsche Gesellschaft für
Internationale Zusammenarbeit
(GIZ) GmbH
1st Floor, B-5/2, Safdarjung Enclave
New Delhi – 110 029, India

T +91 11 4949 5353

M markus.wypior@energyforum.in

W www.energyforum.in

▶ Berlin

Indo-German Energy Forum (IGEF)
c/o Deutsche Gesellschaft für
Internationale Zusammenarbeit
(GIZ) GmbH
Köthenerstraße 2
10963 Berlin, Germany

T +49 30408190 462

M hannah.sternberg@energyforum.in

W www.energyforum.in

Thank you!