

Information about the Work Package of the Partners of the SHAKTI Project

Project Phase 1 - from 2005 to 2008

Work Package No 3	Decentralized Energy Systems
Coordination:	EIFER
Objectives	<ul style="list-style-type: none"> • Developing long-term sustainable energy policies • Implementation plan for energy efficient supply systems
Main Interactions	WP1, WP2, WP4, WP6, WP7, WP8
Description of Work	
<p>Task 3.1: Background study on the local energy sector The background study on the energy sector in Hyderabad will be worked out in close cooperation with the Central Power Distribution Company of Andhra Pradesh and should provide basic knowledge about</p> <ul style="list-style-type: none"> - the local electricity supply system, localisation of the power stations - use of primary energy sources - schemes of the transportation network and distribution grid - types of transformer stations - localisation of the main consumers - electricity load curve of each city's district etc. - energy consumption habits in different neighbourhoods <p>Task 3.2: Developing long-term Energy policies Many local policy options are available to influence energy supply, energy use and city infrastructure, while respecting social, economic and other environmental targets. According to the local context, we will assess how the local authorities can:</p> <ul style="list-style-type: none"> - influence the urban planning and construction sector by imposing energy efficient standards for new buildings, exceeding national requirements. They may have their own codes to assess the building energy performances before granting building permits or selling public properties. - use fiscal instruments such as the electricity tax or subsidies for stimulating energy saving measures in all sectors They may encourage banks to provide low-interest loans in the areas energy conservation or environmental protection. Utilities can also offer financial support to implement demand side management programmes. - find complementary funding by setting up consortiums and partnerships to involve citizens, companies and other key actors in their projects. In this framework several financing and organisations schemes may be developed and implemented within Public-Private-Partnerships (PPPs) or Private Participation in Infrastructures (PPIs): These forms of co-operation between public and private sector carry the potential to create multiple benefits, e.g. enhancing the transfer of management skills, technical know-how and capital.... - find operational support on national and international level to establish and implement their project. This support includes guidelines, networks, project experience, tools and consulting services. <p>Based on the current situation and projected growth the future energy consumption will be estimated and visions for future energy systems (medium and long-term) will be developed. Additionally the relevant policies will be elaborated and strategies for transition discussed.</p> <p>Task 3.3: Basic assessment for implementation of decentralized energy systems A study will be carried out to assess how Distributed Generation (production means with a power lower than about 3 MW) could complement the current centralized supply system to cope with the growth of the city. The emphasis will be put on the use of renewable energies and of production means with very high efficiency (Combined Cold and Power...). The work will be carried out in tight collaboration with the Central Power Distribution Company of Andhra Pradesh.</p> <p>Task 3.4. Input for WP 7 Monitoring & Evaluation Identification of relevant data for long-term groundwater monitoring and defining a set of indicators (economical, ecological and social) for monitoring and evaluation of the implementation projects</p>	

Deliverables	<ul style="list-style-type: none">• Background study on existing energy consumption and electricity production and distribution system• Framework for future long-term energy policies with implementation strategies• Implementation plan for pilot project for energy efficient supply system based on renewable primary energy sources• Set of sustainable indicators and basic data for monitoring process
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