

Some Example Projects and Initiatives

- en.lighten initiative
- Rural Energy Enterprise Development (REED1 and REED2)
- Solar and Wind Energy Resource Assessment (SWERA)
- Financial Risk Management (RISK)

Many of these projects provide a good basis for expanding energy activities as part of the Bali Strategic Plan on Technology Support and Capacity Building.





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efficient lighting for developing and emerging countries

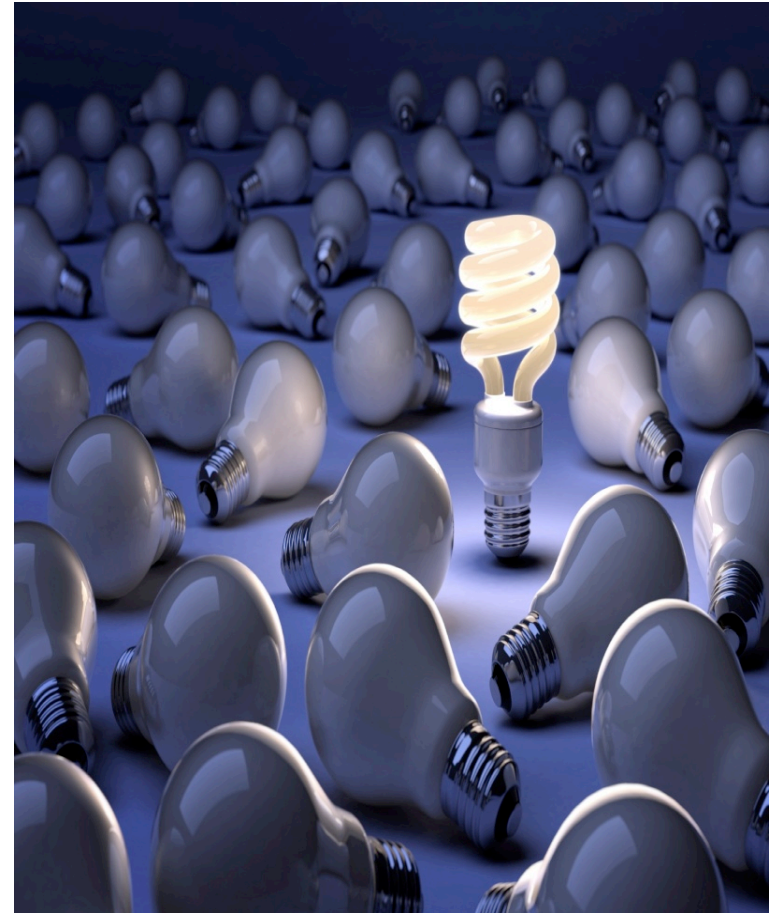
Lighting, energy and climate change

- 19% of total global electricity consumption (IEA)
- 50-70% of total lighting market sales are ILs
- Equals to 6 to 8% of global CO₂ emissions (IEA) = Germany + Japan



The lighting revolution...

- New efficient technologies (CFLs, linear fluorescent, LEDs)
- Efficient lighting programmes: many but dispersed
- Lack of global systematic action to push for efficient lighting
- 2/3 of global lighting installed base is still old technology
- Need to act to reduce CO₂ emissions!





Some barriers to global efficient lighting

- Sub optimally drafted energy/environmental performance standards
- Low quality/performing products
- Lack of information and consumer misconceptions about replacement products...
- Lack of effective end of life treatment/recycling systems
- No global consensus to phase out inefficient lighting





How en.lighten plans to help achieve the potential?

- Agreeing on globally harmonized quality & performance standards
- Taking stock of global best practice & disseminating it
- Assisting countries in setting up adapted policy and technical approaches
- Establishing a global network of stakeholders committed to efficient lighting
- Promoting a global agreement to phase out





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Member organizations

Government & public institutions

- Bureau of Energy Efficiency India
- Department of Climate Change and Energy Efficiency, Australia
- Department of Energy, USA
- US Environmental Protection Agency
- Department of Energy, Philippines
- Environmental Management Bureau, Philippines
- Ministry of Environment and Forests, India
- Ministry of Environment, Brazil
- Ministry of Environment, Japan
- Ministry of Environmental Protection of China
- Phasing-out of Incandescent Lamps & Energy Saving Lamps Promotion Project, PILESLAMP, China
- National Lighting Test Centre of China
- Ministry of Basic Industry, Cuba
- National Energy Efficiency Agency, South Africa
- German Technical Cooperation

Private sector

- OSRAM
- Philips Lighting
- China Association of Lighting Industries
- Electric Lamp and Component Manufacturers Association of India

International organizations

- European Commission
- International Finance Corporation
- United Nations Development Program
- World Bank
- International Electro Technical Commission

Civil society

- Clinton Climate Initiative
- National Resources Defence Council
- Eco Asia
- European Environmental Citizens Organisation for Standardisation
- TERI
- Zero Mercury Campaign

Academia

- University of Toulouse, France



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Key outputs

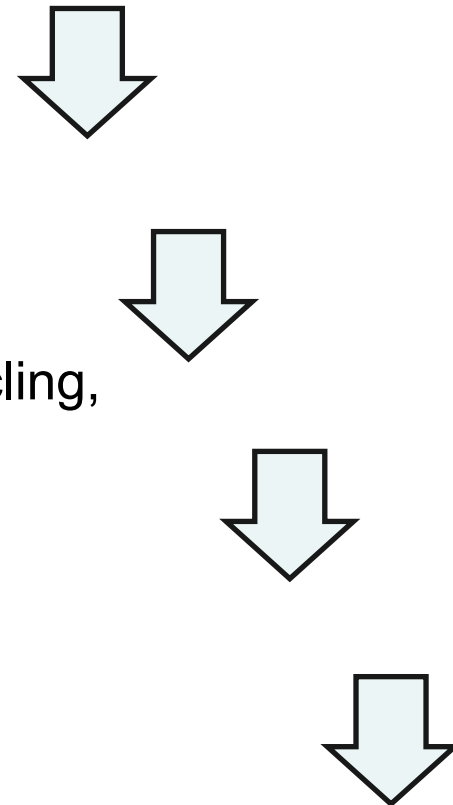
Country lighting assessments

Guidelines for harmonization (performance, quality, certification, standardization, testing, etc)

Toolkit for countries (policy, finance, recycling, verification, communication, etc)

Backstopping support to countries (next to partners)

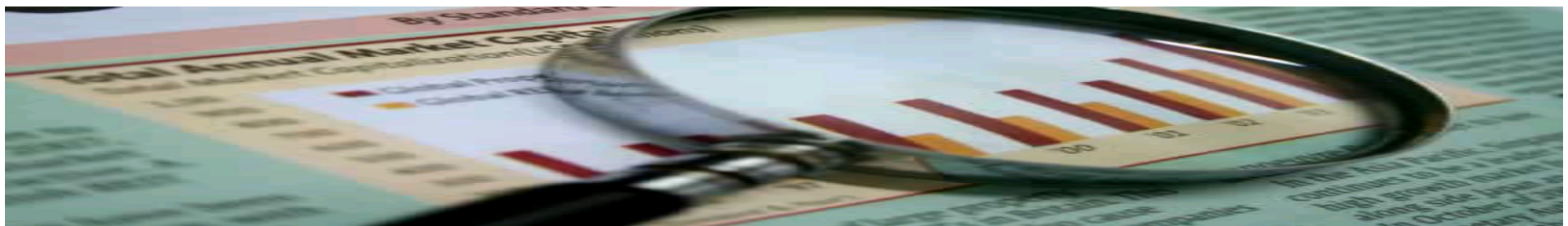
Global road map for market transformation and inefficient lighting phase out





First generation Country Lighting Assessments (CLA)

- Estimates for 100 countries of **energy savings, finance and CO2 reductions** by moving to efficient lighting technologies
 - Based on benefits of shifting from incandescent lamps (IL) to compact fluorescent (CFL)
- ILs are not the only inefficient technology, but their wide use is an example of the potential of efficient lighting
 - As an effective tool to cut carbon emissions and stabilize climate
- Other technologies and applications (not considered in CLAs) will significantly increase these gains
 - Advanced linear fluorescent lamps, LED used in commercial outdoor lighting, controls, sensors, etc.



What do CLAs estimate?

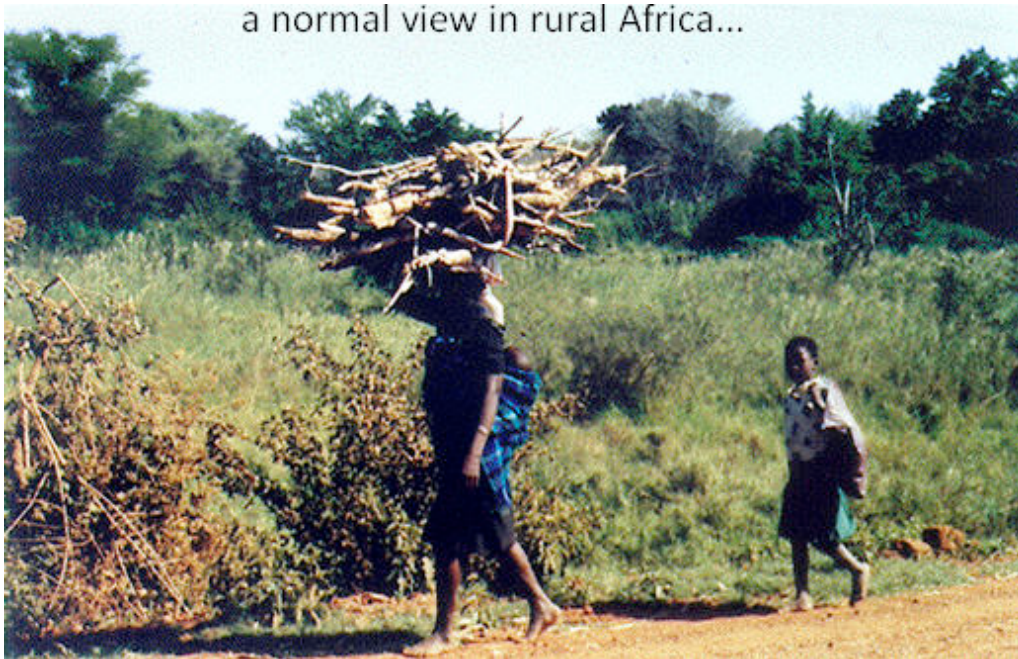
1. **Annual energy consumption for the installed base of:** ILs, CFLs and other efficient technologies
2. **Annual energy savings by making the switch from IL to CFL**
3. **Annual financial savings**
4. **Annual reduction in CO2 emissions:** compared to national emissions from fuel combustion
5. **Amortization costs:** pay-back periods of the shift
6. **Transition costs:** cost of lamps, readiness activities & infrastructure

REED1 and REED2

Rural Energy Enterprise Development

Focuses on enterprise development and seed financing for clean energy entrepreneurs, as well as end users of finance in developing countries.

a normal view in rural Africa...



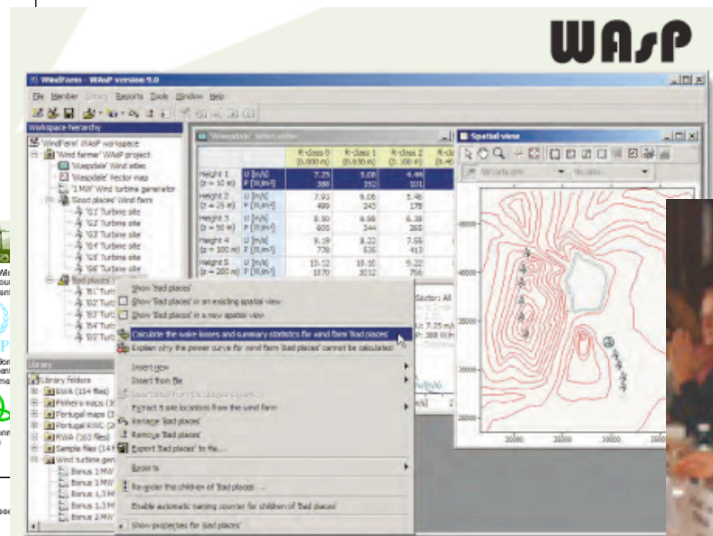
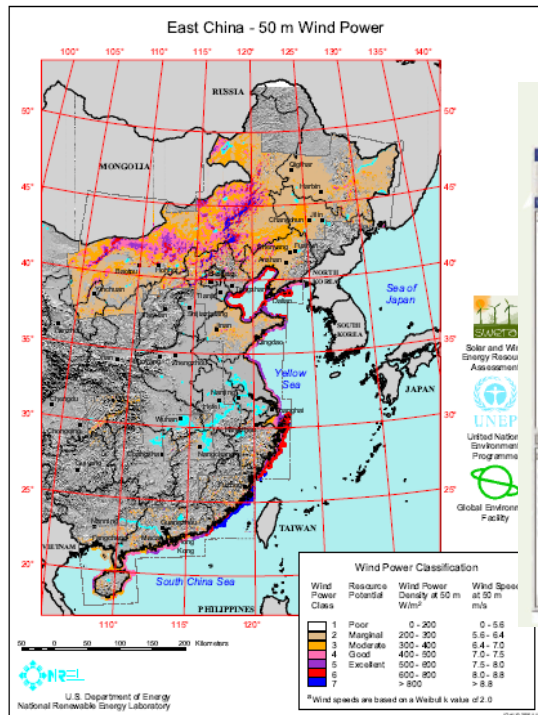
* Today REED1 and REED2 programmes are operating in five countries of West and Southern Africa and in China's Yunnan Province.





Solar and Wind Energy Resource Assessment

- Publishes Resource Data
- Develops national assessments
- Assists policy-makers and consumers
- Serves investors and developers
- Trains developing country users



Financial Risk Management

Assessment of Financial Risk Management Instruments for Renewable Energy Projects in Developing Countries



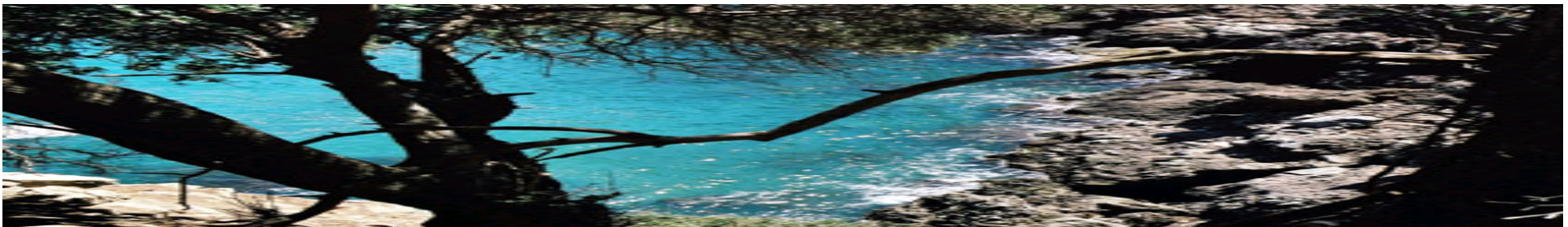
To bring about the faster and more systematic deployment of Renewable Energy (RE) by supporting and positively influencing the development of markets for RE risk management instruments/ approaches

UN Energy

- Interagency group established to bring better coordination to UN activities related to energy,
 - No single UN agency “responsible” for energy
 - CSD14/15 provides a focus
 - Earlier experience with Interagency Task Force on Energy prior to CSD9

- Participating: UNEP, UNDP, FAO, UNIDO, IAEA, UNDESA, UNCTAD, UNFCCC secretariat, World Bank

- Activities:
 - Internal sharing of information on work programmes
 - Preparation for CSD (Secretary General’s report, side events)
 - Analysis / publications
 - Possible joint field activities (e.g., bioenergy)



Thank You!

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