



United Nations Development Programme



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Global Forum on Sustainable Energy
GFSE - www.gfse.at

Energy between Danube and Caucasus

The role of Renewable Energy and Energy Efficiency as a key issue for economic development

UNDP Experiences in Implementing EE & RE Projects in the Region

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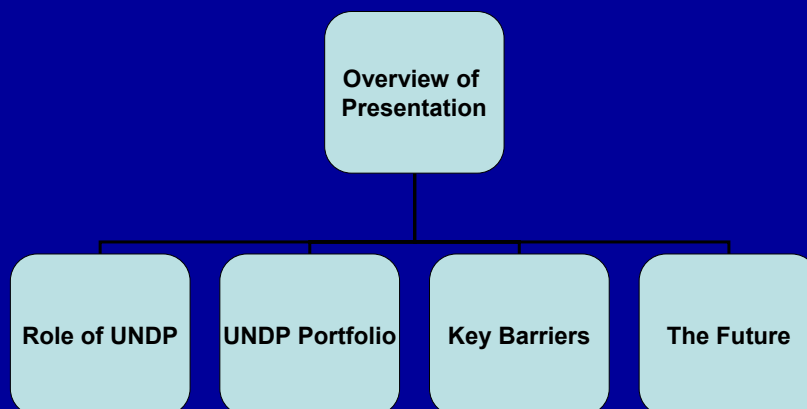
28 April 2011

Regional Meeting of the GFSE, Vienna 28 and 29 April



United Nations Development Programme

OVERVIEW



Regional Meeting of the GFSE, Vienna 28 and 29 April



Why RE is not taking off



500 billion per year in subsidies for coal and for oil

Awareness Raising & Capacity Building is not going to have much impact when the cheapest fuel sources are coal, oil, and gas

Fossil Fuels have a comparative disadvantage

- They are often subsidized
- They do not pay for the air pollution they cause
- They do not pay for the fact they are destroying the planet

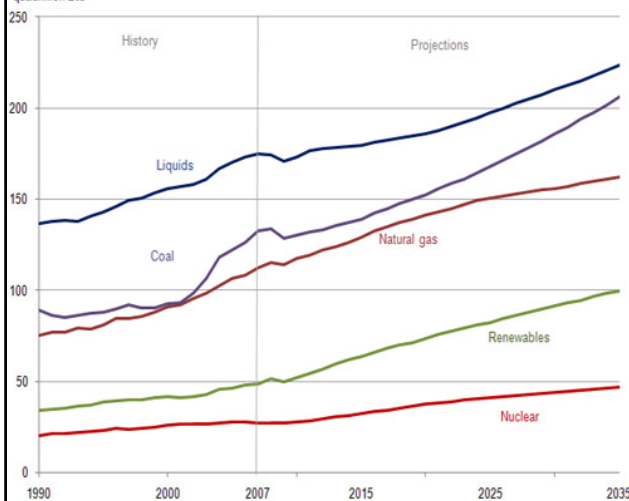
This situation has to change.



Future World Energy Use by Fuel Type

Figure 16. World marketed energy use by fuel type, 1990-2035

quadrillion Btu

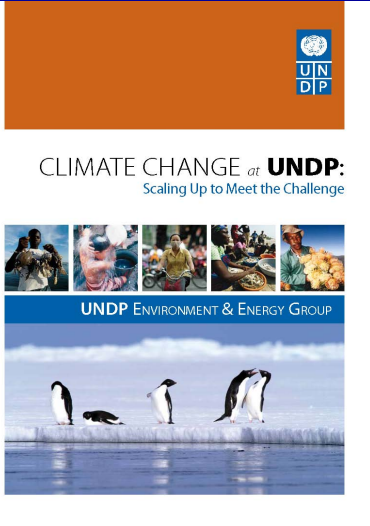


WORDS vs REALITY

Source: EIA Outlook 2010



Role of UNDP



166 Countries, 135 Offices in 6 Regions
 Annual Budget of US\$6 billion dollars
 Country Driven – In-Country Support

6 Focal Areas

Energy & Environment

- Renewable Energy - \$860 million
- Energy -Efficiency – 1 billion
- Sustainable Transport - \$890 million
- Carbon Finance (MDG Carbon Facility)

GRANT AGENCY – NOT LOANS

UNDP runs UN Resident Coordinator System
Whereby ResRep is also Resident Coordinator

US\$80M in this region ; 26 projects



Role of UNDP

UNDP Climate Change Mitigation projects are aimed at removing barriers ...

Renewable Energy	Energy-Efficiency (Residential Sector – Private and Public Buildings)	Transport
Green Tariffs Other Secondary Legislation Long-Term Power Purchase Agreements Financing Mechanisms Support for Investment Demonstration Projects	Legislation Building Codes Standards & Labels Energy Audits Financing Mechanisms Support for ESCOs Support for Investment	Transport Planning Traffic Management Fuel Cell Buses and Taxis Institutional Transformation (of Government)



Value of the CCM Portfolio has increased from \$33m to \$70 million by 2011 ...

Operational Program	Total Number of Projects	Value of GEF Funding	Number of Projects Completing PIR this Year (1)	New Recently Started Project for which no PIR is required
OP 5 – Energy Efficiency	18	55.52	11	2
OP 6 – Renewable Energy	6	12.88	6	0
OP 11 – Transport	2	2.00	0	0
Total	26	70.40	17	2

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Ten new Climate Change Mitigation Projects in the last 12 months totaling over \$35m include the following projects ...

Country	Project	Prodoc Signed	Amount USD M
Armenia	EE Buildings	July 2010	\$1.00
Kyrgyzstan	Small Hydro	February 2010	\$1.00
Russia	EE Lighting	April 2010	\$7.00
Russia	EE Standards & Labels	August 2010	\$7.80
Russia	EE North-West Buildings	September 2010	\$5.60
Russia	Greening Sochi Olympics	Dec 2010	\$1.00
Serbia	Sustainable Transport	May 2010	\$1.00
Tajikistan	Sustainable Transport	April 2010	\$1.00
Turkey	EE Buildings	August 2010	\$2.62
Turkey	EE Standards & Labeling	March 2010	\$2.70
Ukraine	EE Lighting	March 2011	\$6.50

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Lessons Learned from Selected Ongoing Projects ...

Croatia Energy-Efficiency

- National EE Master Plan
- Municipal EE Charter
- Ongoing Govt Programs
- \$40m in EE investments is leveraged

Georgia – Renewable Energy

Established Renewable Energy Fund
Business Plan /Feasibility Support
Financing for Khadori-2

Belarus EE State Sector

Special Partnership Agreements
Energy Centre
Energy Platform

Ukraine ESCO Rivne

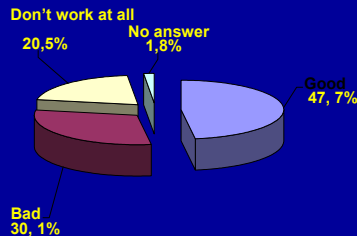
Public-Private Partnership
32 Boilers constructed
Municipal heating (schools, hospitals)
ESCO proved 'too' difficult



Energy Efficiency – 70% of the Project Portfolio

Key Barriers to remove:

How do you think about work the heating supply system in your apartment?



Turkmenistan: 50% of customers are not satisfied with heat systems

- Poorly designed and insufficiently enforced legal and regulatory framework
- Weak capacities to identify and implement energy efficiency measures among municipalities, tenants and district heating companies
- Financing Barrier – access to credit is very difficult
- Global Lessons Learned Study being undertaken



Lessons learnt: Working Well and Areas for Improvement

UNDP works well when it comes to

- * working at a local level (municipalities, local authorities)
 - * changes in policies, legislation, regulations where there are strong local relations with government, local authorities
 - * awareness raising activities
 - * guidebooks, training materials
 - * demonstration activities
- Where UNDP can improve

- * Coordination with other Agencies
- * Finding Investors/Engaging Private Sector
- * Technical Assistance linked to 'Investment'
- * Upscaling Activities & Replication



Up scaling EE Activities : Options for Consideration

Option	Issue	Conclusion
Loan Guarantees	Banks are reluctant to provide loans to home owners due to their inability to provide adequate security	Needs more analysis.
Free or Subsidized Audits	Many companies / households don't recognize they have a problem	Successful Experience in UK and other EU countries.
Carbon Finance	High Transaction Costs for Small Emission Reductions	Very Limited Impact – less than 10% of all CDM projects are EE.



Do you believe in
a low-carbon,
poverty-free future
for everyone
on the planet?
We do.

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Thank you!