



WP4b

**Mechanisms and channels of relations between energy supply
and demand policies and economic and social development
(D4b.6/Task G)**

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Outline



1. Goals and Scope of the report
2. Methodology
3. Main Outcomes
4. Best Practices
5. Policy Recommendations

1. Goals and Scope of the report



Goals

- Identify and assess the impact and interactions between the SEMC/MED-11 socio-economic developments and energy supply and demand policies
- Provide inputs to other WP4b Tasks (Policy Brief and energy demand /supply trends) and other WPs

Scope

- Links and interactions in MED-11 between
 - Energy supply and demand with economic and social development
 - Energy supply and demand policies on both

2. Methodology



- Methodology
 - Literature survey: national and regional energy and multi-sector studies (inc. MedPro) and donor projects
 - MED-11 and other regions / countries experiences and references
 - Own analysis supported by statistical analysis
- Team
 - E. Bergasse
 - W. Paczynski

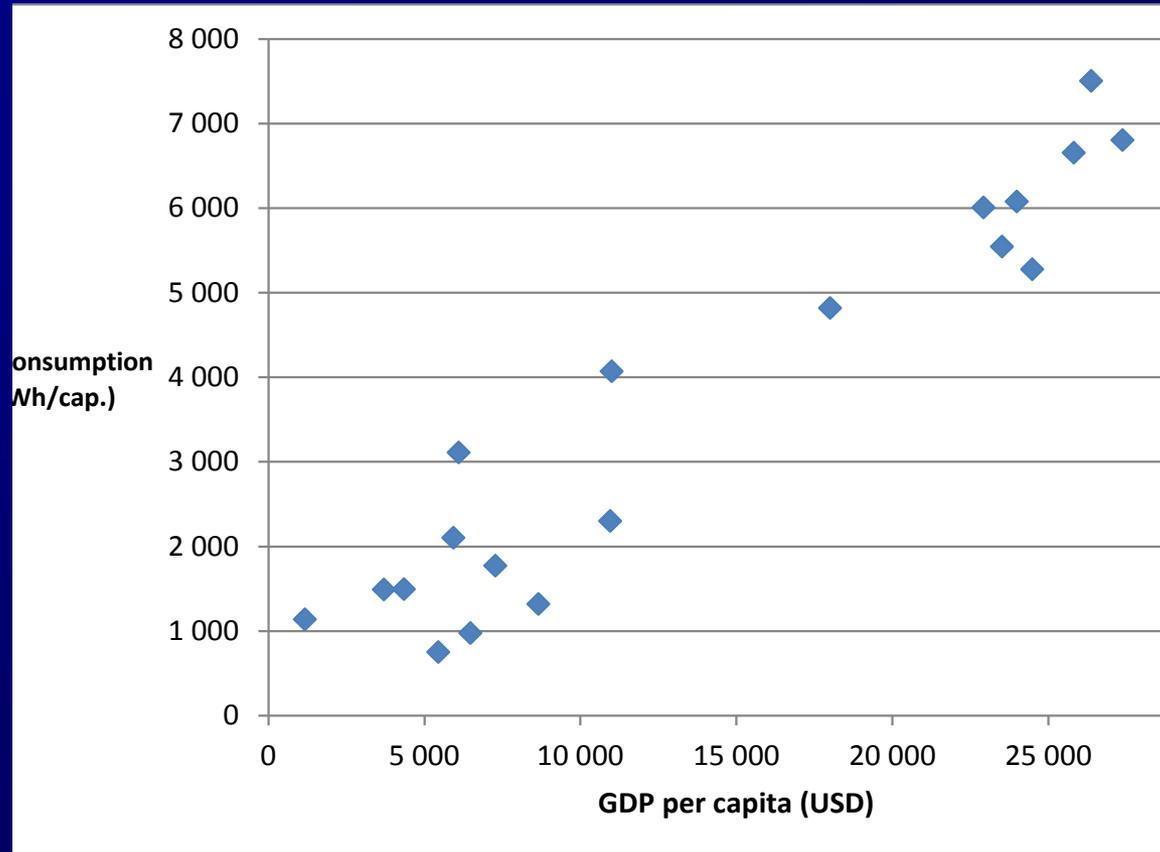
3. Main Outcomes



A. Energy & Socio-economic development

- Energy as essential commodity enabling socio-economic development
- Patterns of energy supply and consumption strongly affect MED-11 macro-economies (fiscal balances and poverty trends)
- Strong links and interactions between energy (and higher with electricity) and socio-economic development
 - MED-11: high electrification rate but poor face problems to access services and blackouts limiting socio-economic benefits
 - Rising MED-11 energy demands press infrastructure and push for major new investments

GDP and electricity consumption MED 11 and EU countries (IEA, 2009)



Universal Subsidies: a complex issue

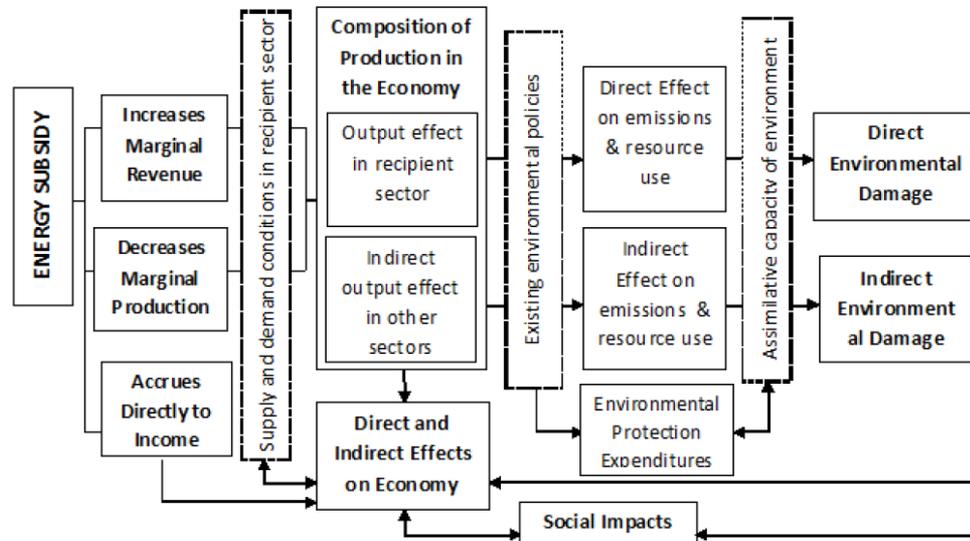


- Excessive energy bills (high consumption and prices/revenues) harm living standards and socio-economic development leading to energy poverty
- MED-11 response to energy poverty (access) & poverty : **universal energy price consumption subsidies** (all customers) for fuels (LPG, diesel, gasoline) and network energies
 - Inefficient to mitigate energy poverty: limited impact for the poor as restricted access and low consumption
 - Unfair: 80% benefit the wealthiest and create shortage
 - Costly: high burden for state budgets (cost paid by all)
 - Detrimental to demand control, EE and RE
 - Encourage smuggling and pollution

Energy Subsidies (UNEP)



Fig. 1.1 Social, Economic, and Environmental Impacts of Energy Subsidies (UNEP)



Source: adapted from UNEP (2004)

Energy & Socio-economic development (3)



B. Role and impacts of energy supply & demand policies

- Supply policies: Pricing and subsidies
 - Universal social tariffs → Inequalities (rich benefit most) and demand surge
 - Targeted social tariffs (e.g. block tariff): protect poor and give incentives for savings and off peak
- Demand policies: Energy efficiency
 - Standards and labels: inform consumers on appliance's energy and water consumption → Purchase and use behaviours → Demand control → Reduced investment and subsidies

Energy & Socio-economic development (4)



C. Energy exports: oil curse/syndrome

- Large hydrocarbon revenues in Algeria & Libya: dominant share of exports and state budget
- Rent-seeking strategies
 - Systematically generate structural domestic imbalances
→ harm economic growth and socio-economic development → sub-development
 - Lock economies and public budgets into dependency on a single sector and one commodity market

Oil paradox in Algeria



- **Hydrocarbon dominance**

- 50% of GDP, 97% of exports, 66% of public budget

- **Macro-economic performance** (2000-09)

GDP (+3.7%), inflation (4-5%), monetary reserves (\$170 bn ~ 75% GDP PPP), debt repayment (\$25 bn)

- **Public investment programme** (2001-2009: \$200 bn and 2010–14: \$280 bn) on infrastructure and public services

- **Structural imbalances**

- ✓ Dominance of services and imports, oil price dependency
- ✓ Unemployment (15%, youth: 30%), 25% below poverty line, lack of access to basic services, 22% illiteracy rate, inequality (20% controls ~ 50% GDP) → 94th in UNDP Human Development Index
- ✓ Dinar depreciation, capital leakage (\$25 bn)

4. Best Practices



Universal subsidies phasing out: Jordan

- Gradual phasing out of fuel price subsidies (2008: 5% → 2010: 2% of GDP): oil product prices liberalized and fuel price subsidies eliminated except LPG
- Targeted subsidies: National Aid Fund → individual safety net
- Lifeline (or “block”) electricity tariff
- Increase of civil servant salaries

Best Practices (2)



Demand policies: Tunisia

- National priority: Energy strategy and EE&RE action plans
 - Institutional strength: energy and environment ministries, EE&RE agency, statistical office
 - EE&RE Programmes (solar, S&L) and tools (EE&RE funds)
- 1990-2011 primary energy intensity: -27%
- Share of RE: 14% primary energy

5. Policy Recommendations



→ **Pillars for integrated socio-economic development and energy/climate policies:**

1. Long-term socio-economic development strategy

- Robust institutional set-up
- Solid statistical system
- Enhanced public governance (including oil revenue management)
- Poverty reduction strategy with targeted support (instead of universal consumption price subsidies)

2. An integrated energy/climate policy

- Global energy strategy (security and access, full cost-reflective energy prices and energy sector restructuring)
- EE&RE action plans with strong institutions (ministries and agencies) in synergy with climate policies (carbon financing)



3. Regional energy cooperation (intra-Med and EU-MED)

- Infrastructures (power and gas interconnections)
- Market reforms and sustainable energy (e.g. EU/MED-11 renewable electricity market), fostered by the Mediterranean Solar Plan (MSP)
- Integrated regional financing (EBRD, regional bank)



Thank you! Merci!

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