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European Commission

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DEVELOPMENT OF ENERGY EDUCATION IN THE MEKONG AREA – DEEM 2016-2019

Noora Vähäkari
Project Manager

Finland Futures Research Centre Development Days March 2017

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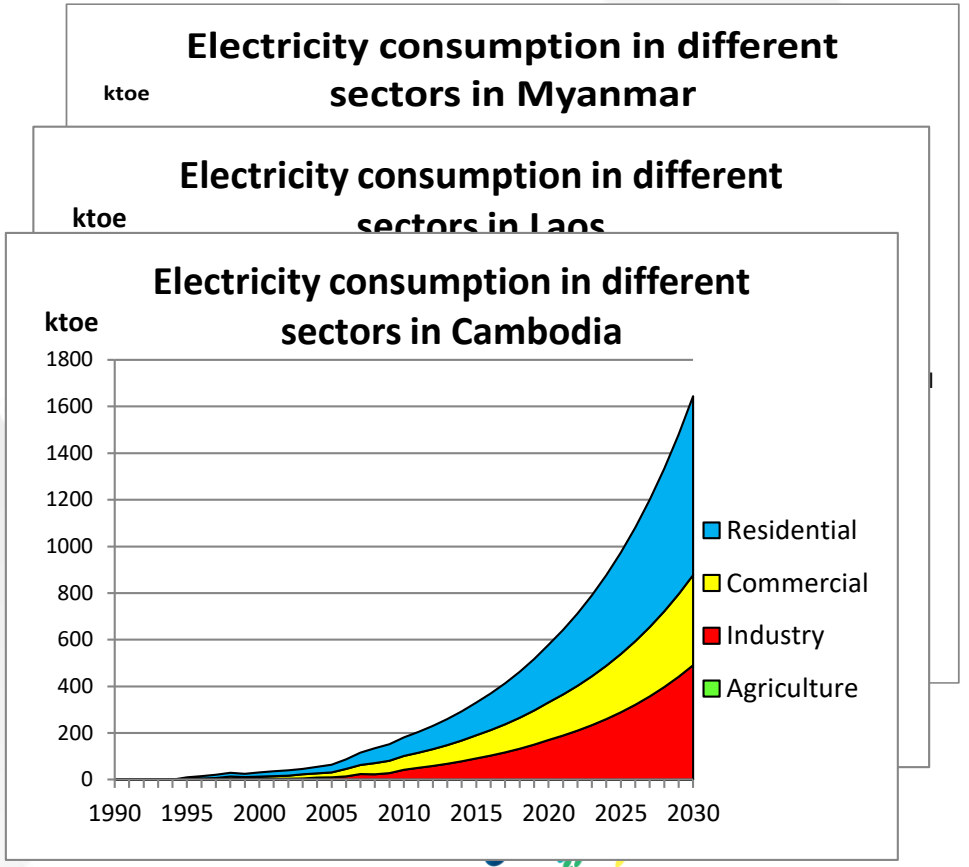
RENEWABLE ENERGY FUTURES IN THE MEKONG

- Energy demand in Mekong countries (Cambodia, Laos and Myanmar) has been increasing fast
- Role of new renewable energy sources (wind and solar) is still quite small
- Challenge: How to plan the future energy system in a changing environment



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National Urban and Rural Electrification Rate Targets

(Source: Intelligent Energy Systems 2014)

	CAMBODIA			LAO PDR			MYANMAR		
	2013	2030	2050	2013	2030	2050	2013	2030	2050
URBAN	89,6%	97,0%	99,5%	98,2%	99,0%	99,5%	**36,1%**	97,0%	99,5%
RURAL	**20,1%**	94,5%	98,5%	**81,1%**	95,0%	99,0%	**15,6%**	94,0%	98,5%

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DEEM PROJECT

- **Challenge: Changing energy planning environment**
- Increased emphasis on environment
- The price of renewable energy (wind and solar) has been steadily going down
- How to utilize renewable sources in the best way in the future (100% RE scenarios by ADB, WWF)

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DEEM PROJECT PARTNERS

- University of Turku, Finland (coordinator)
- Wageningen University, The Netherlands
- Europe University Flensburg, Germany
- Tampere University of Technology, Finland
- Royal University of Phnom Penh, Cambodia
- Institute of Technology of Cambodia, Cambodia
- National University of Laos, Laos
- Yangon Technological University, Myanmar
- University of Yangon, Myanmar

Associate Partners:

- Mekong Energy and Ecology Network, Thailand
- Ministry of Environment, Cambodia

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WIDER PROJECT OBJECTIVE

- **To ensure HEIs (NUOL, ITC, RUPP, YU,YTU) are able to respond to capacity and employment needs of the sustainable energy development in Cambodia, Laos and Myanmar**

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SPECIFIC PROJECT OBJECTIVES

1) **In 2019, 5 HEIs in Mekong have improved multidisciplinary energy education teaching capacity (curricula and methods) and tools (equipment & software) towards the acquisition of skills and expertise needed in energy sector development**
2) **Enhanced quality assurance on financial, administrative and project management capacities at 5 Mekong partner HEIs by 2019**
3) **By 2019 regional and national Higher Education institutions partnerships and networking between private and public sector actors is established to promote sustainable energy education, research and policy-making**

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ENERGY EDUCATION NEEDS?

- **Energy related education has to respond to the future society and sector needs**
- **Consider stakeholder views (ministries, industries, researchers, int. NGOs)**
- **Expert capacity in**
  - **different technologies**
  - **environmental issues**
  - **economics**
  - **legislation**
- **Multidisciplinary expertise and problem-based learning**

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