



MINISTRY OF INDUSTRY, MINES AND ENERGY KINGDOM OF CAMBODIA

**Training and Workshop on Small Hydro
Power for Developing Countries.**

Hangzhou, May 26 to July 06, 2011.

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II. Energy Policy

It was formulated in October, 1994 with the following objectives:

- To provide an adequate supply of energy throughout Cambodia at reasonable and affordable price,
- To ensure a reliable and secured electricity supply at reasonable prices, which facilitates the investments in Cambodia and developments of the national economy,
- To encourage exploration and environmentally and socially acceptable development of energy resources needed for supply to all sectors of Cambodia economy,
- To encourage the efficient use of energy and to minimize the detrimental environmental effects resulted from energy supply and consumption.

III. Hydropower in Cambodia

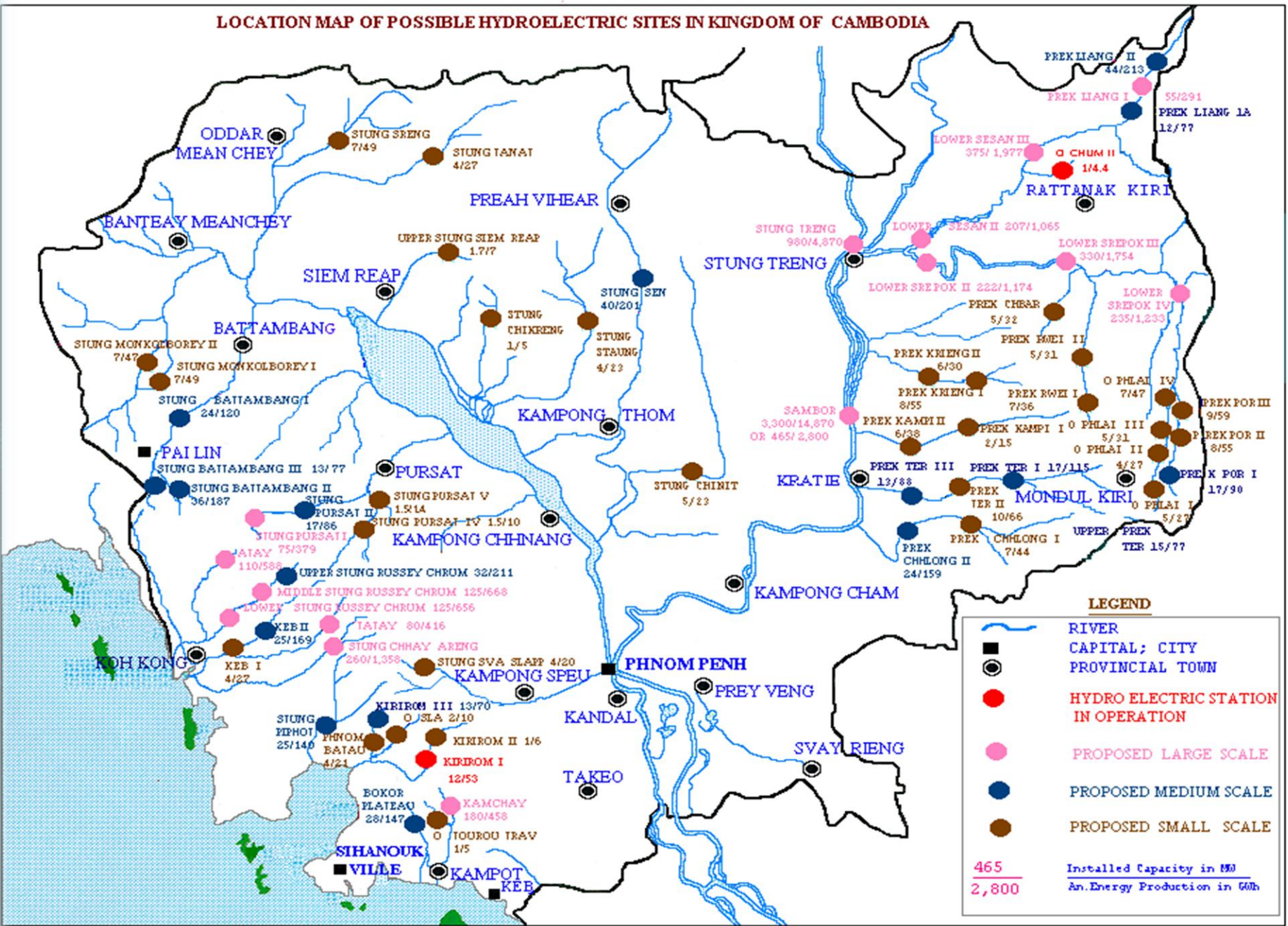
Hydropower Resources

- Total hydropower potential is estimated about 10,000 MW.
- 50% in the Mekong River mainstream,
- 40% in the tributaries of Mekong River and
- 10% in the South-western coastal area outside the Mekong Basin.

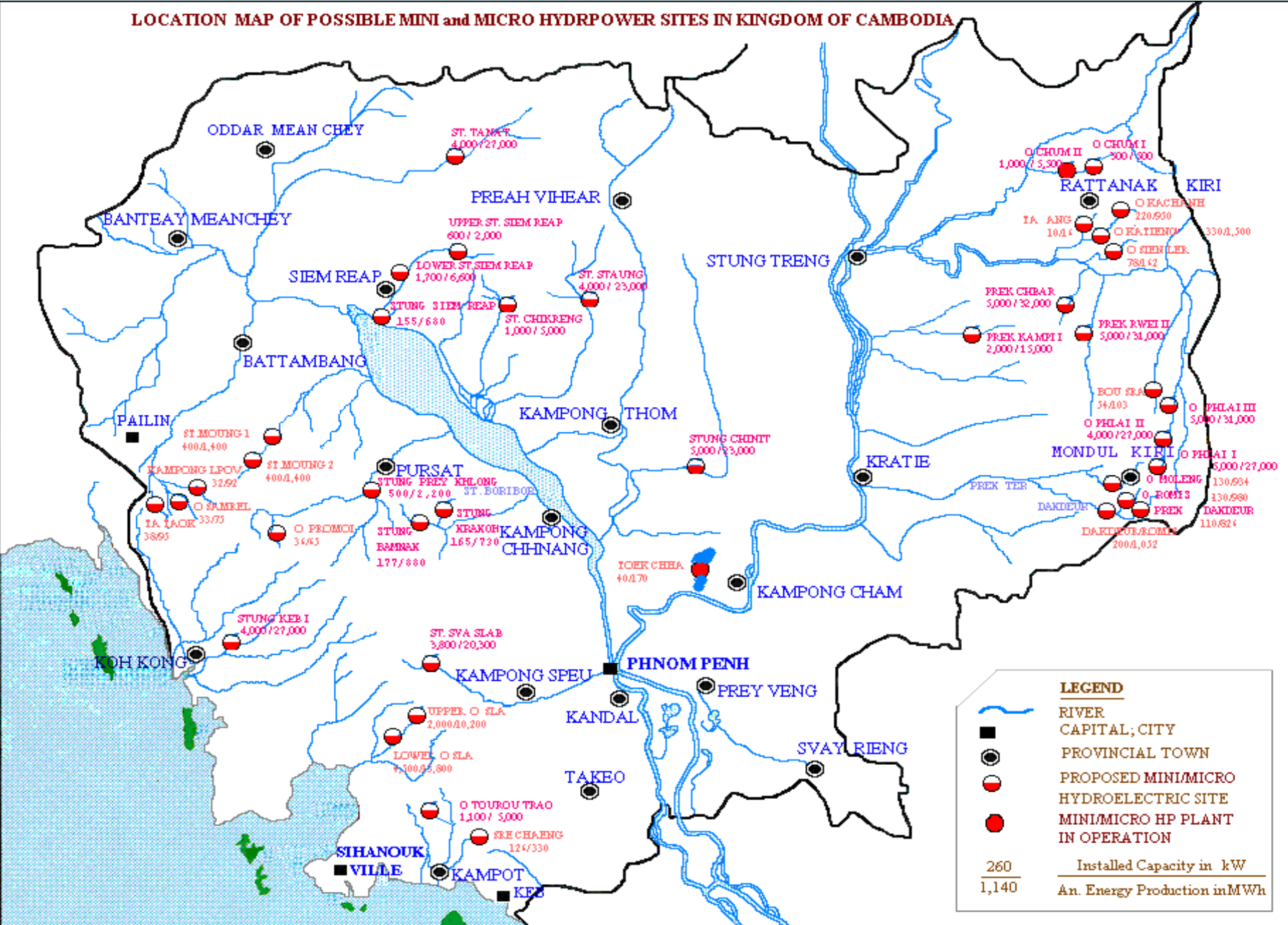
Table: Classification of Hydropower Plants (HPP)

Type of HPP	Installed Capacity (kW)
Small - Micro	Up to 500
- Mini	501 – 10,000
Medium	10,001 – 50,000
Large	more than 50,000

LOCATION MAP OF POSSIBLE HYDROELECTRIC SITES IN KINGDOM OF CAMBODIA



LOCATION MAP OF POSSIBLE MINI and MICRO HYDRPOWER SITES IN KINGDOM OF CAMBODIA



LEGEND

- RIVER
- CAPITAL; CITY
- PROVINCIAL TOWN
- PROPOSED MINI/MICRO HYDROELECTRIC SITE
- MINI/MICRO HP PLANT IN OPERATION

260	Installed Capacity in kW
1,140	An. Energy Production in MWh

List of Mini and Micro-Hydropower Projects in Cambodia

No	Project Name	Capacity	Location	Remark
1	Kiriom I (By IPP)	12 MW	Kampong Speu	Completed in 2002
2	Kirirom III (By IPP)	15 MW	Kampong Speu	Under construction
3	O' Mleng (Japan Grand Aid)	130 KW	Mondul Kiry	Completed in 2008
	O' Romis (Japan Grand Aid)	130 KW		
4	Prek Teuk Chhu	762 KW	Kampot	Desk Study
5	O' Turou Trao	1.122 MW	Kampot	Desk Study
6	Stung Siem Reap 3	1.7 MW	Siem Reap	Desk Study
7	O' Katieng	1 MW	Rattanak Kiry	Desk Study
8	O' Sla Up Stream	1.9 MW	Koh Kong	Desk Study
9	Stung Chikreng	0.8 MW	Siem Reap	Desk Study
10	Stung Kep	4.1 MW	Kep City	Desk Study
11	O' Phlai	3.4 MW	Mondul Kiry	Desk Study
12	Prek Por	4.8 MW	Mondul Kiry	Desk Study

Existing Hydropower in Cambodia

- O Chum II hydropower, installed capacity 1MW in Ratanakiri province was commissioned since 1993.
- Kirirom I hydropower, installed capacity 12MW, in Kompong Speu and Koh Kong provinces was commissioned in May 2002.
- O Romis Micro-hydropower, installed capacity 185Kw, in Mondul Kiri province was commissioned in November, 2008.
- O Moleng Micro-hydropower, installed capacity 185Kw, in Mondul Kiri province was commissioned in November, 2008.

Small Hydropower Power

- Cambodia has an enormous water resource for small hydropower development.
- Number of Possible Small Hydropower sites: 30.
- Theoretical Small Hydropower Potential about: 300 MW.

Current Status of Small Hydropower

- Some part of the country Small hydropower may provide opportunities for rural electrification.
- At present only one mini-hydropower plant is in operation with Installed Capacity 1 MW and another 2 micro hydropower plants with 370 kW installed capacity.
- There are also private owned micro hydropower plant with installed capacity ranged from 1kW to 30kW.

Institutional Promotion on SHP

Government promotion on SHP

- Development of SHP will contribute to scale-up access to electricity services for rural area in order to property reduction and foster economic development.
- Encourage private sector participation to develop SHP.
- Finding Technical Assistant and Financial Support.
- Affordable electricity price in rural area.
- Reduce or Free imported tax.

To achieve target 70% of the Rural population has access to quality electricity services by 2030, the RGC have:

- Set-up Rural Electrification Fund (REF) and
- Formulated Renewable Energy Action Plan (REAP)

Donors/ Development Agencies promotion on SHP

Providing Technical and Financial Assistant for the Study and Pilot/Demonstration Projects.

Private Sector and NGOs promotion on SHP

Up to present there are nothing any private sector and NGOs interest SHP.

IV. Conclusion

- Development of Small Hydropower in Cambodia will contribute to the Rural Electrification and Poverty Reduction.
 - To achieve this goal the capacity building of Hydro Electricity Department's staffs is an urgent need .
 - In particular financial support from other Donors is very important for feasibility study and realization of these small hydropower projects.
 - SHP and RE development is a key element of the RGC's rural electrification strategy, for generating electricity
 - In particular Hydropower will play an important role to cover the electricity demand of Cambodia and help to reduce her dependency from imported fuel oil.
 - Need more assistance in the field of expertise and finance to promote and
- ¹³ develop RE.

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Thank you

for your kind attention



Angkor Temple in Seam Reap Province

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