E&S Hydro Program
Promoting a more sustainable hydropower sector
www.ifc.org/mekonghydro

Worldwide, 1.3 billion people lack access to electricity.
Of these, 700 million live in Asia.
Hydropower is a critical sector for development and combating climate change

- Developing countries have a clear need to power economic growth and to improve the quality of life of their citizens. Benefits include increase access to lighting and communications, power to support extractives and industrial development, revenue from royalties and taxes, additional jobs and skills development, community programs, among others.

- Climate change and environmental concerns given diminishing resources or reserves of coal, gas and even water.

- Hydropower energy pose great opportunities for private investors in emerging markets – if capital can be raised and risks overcome.
GLOBAL DRIVERS (IHA, 2015)

- Increase in demand not just for electricity but also for particular qualities such as reliable, local, clean and affordable power
- Demand for electricity and other related reservoir services is high in Asia, Africa and Latin America contributing to overall growth

Investments flows in hydropower set to rise

**Growth in Investment needs in renewable energy (in $ billion)**

Source: UNEP, Bloomberg and IFC SREED data
Hydropower Potential: Understanding the Risks

Why is so much hydro potential untapped?

From a planning perspective hydropower has advantages and disadvantages

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td>Renewable</td>
<td>Long gestation (long wait for returns)</td>
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<td>Very low operating costs</td>
<td>High capital costs (when combined with long wait, the returns are small)</td>
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<td>Long term assets (&gt;100 years)</td>
<td>Multipurpose use of water</td>
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<td>Base load and flexible generation</td>
<td>Hydrological risks</td>
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<td>Helps meet peaking demands</td>
<td>Construction risks (cost overruns are a fact of life – how to fund it ?)</td>
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<td>Synergy with other renewables</td>
<td>Difficulty in signing take-or-pay PPAs</td>
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<td>Dams provide irrigation, flood control, navigation etc.</td>
<td>Environmental &amp; Resettlement Issues (private sector not always well equipped to deal with it)</td>
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<td>High reliance on political / regulatory stability</td>
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The challenge now is to develop this natural resource sustainably.

- Hydropower presents enormous opportunities for economic development
- Huge potential remains to be unlocked, but not without challenges
- Trends are to increase hydro development & need is great
We aim to increase the share of new private sector investments in the hydropower sector that adhere to good international industry practice on environmental and social standards by 2020.
Engaging & Advising Hydropower Companies

Providing hydropower companies the tools, skills and expertise to develop and implement E&S management systems for their operations.

Establishment of HDWG Myanmar

Quarterly Hydropower Developers’ Working Group Meetings & Seminars

Advice to the private sector

Trainings for hydropower companies