

UNFC-based Resource Classification for Hydropower



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**Chair
Work Group
on Application of UNFC to Renewable Energy**



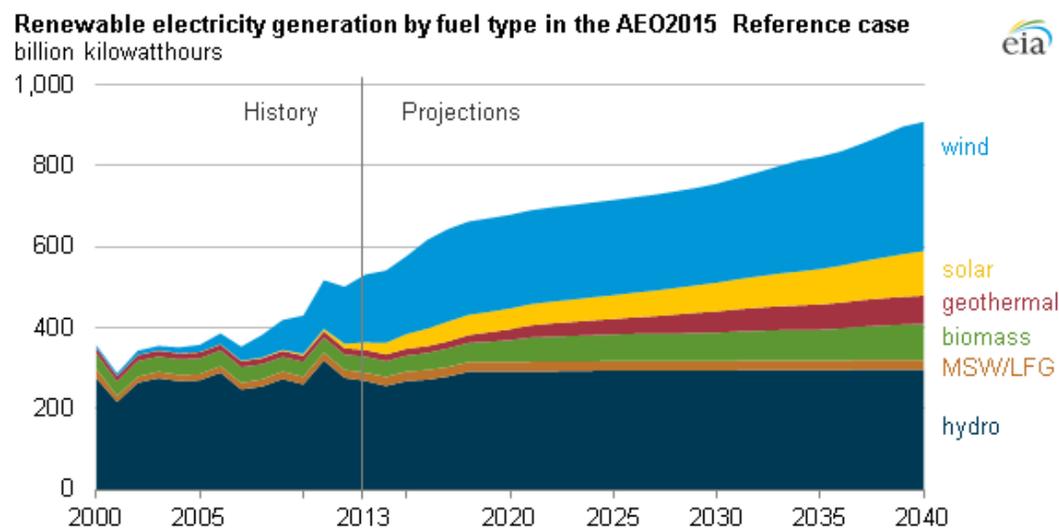
Setting the scene: Hydropower

Hydropower is the most important and widely-used renewable source of energy

Hydropower represents > **16%** (IEA) of total electricity production

China is the largest producer of hydroelectricity, followed by Canada, Brazil, and the United States

(Source: Energy Information Administration, Dec 2, 2016)



Definition and characteristics of Hydropower

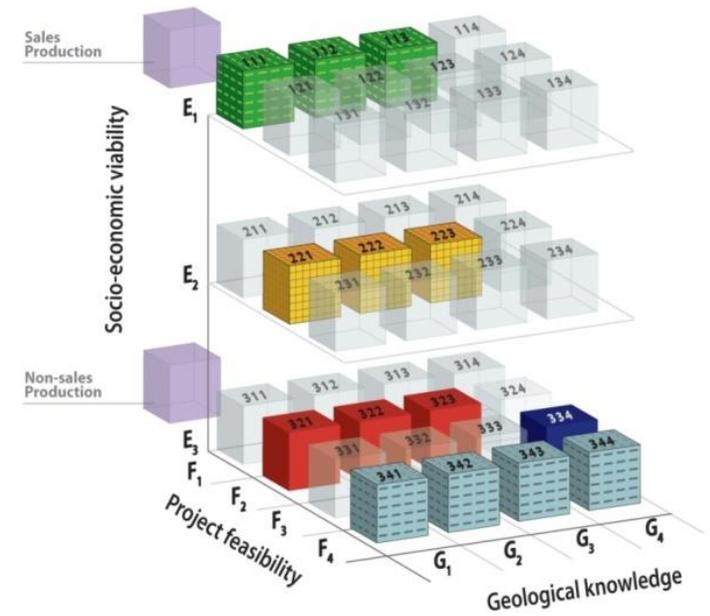
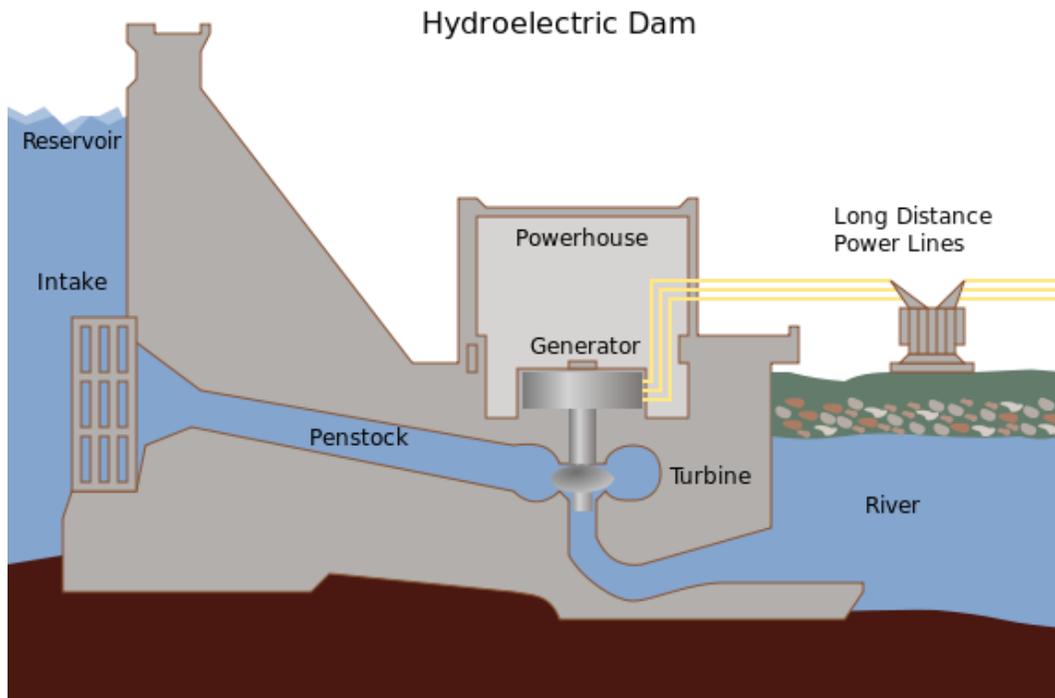
Hydropower derives **energy from turbines being spun by fresh flowing water**. This can be from rivers or from man-made installations, where water flows from a high-level reservoir down through a tunnel and away from a dam.

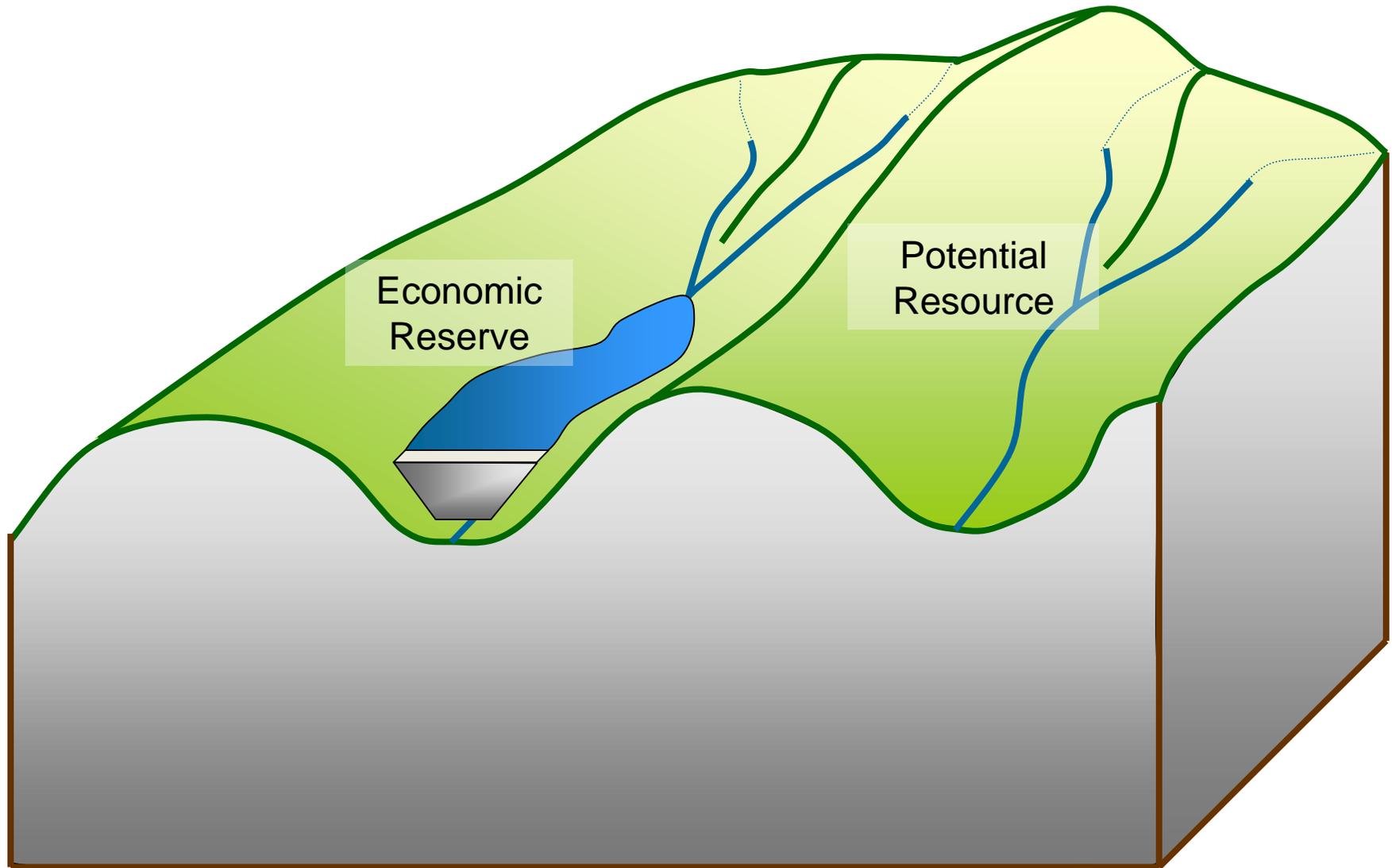
Hydropower is a **mature and cost-competitive renewable energy source**. It plays an important role in today's electricity mix, contributing to more than 16% of electricity generation worldwide and about 85% of global renewable electricity.

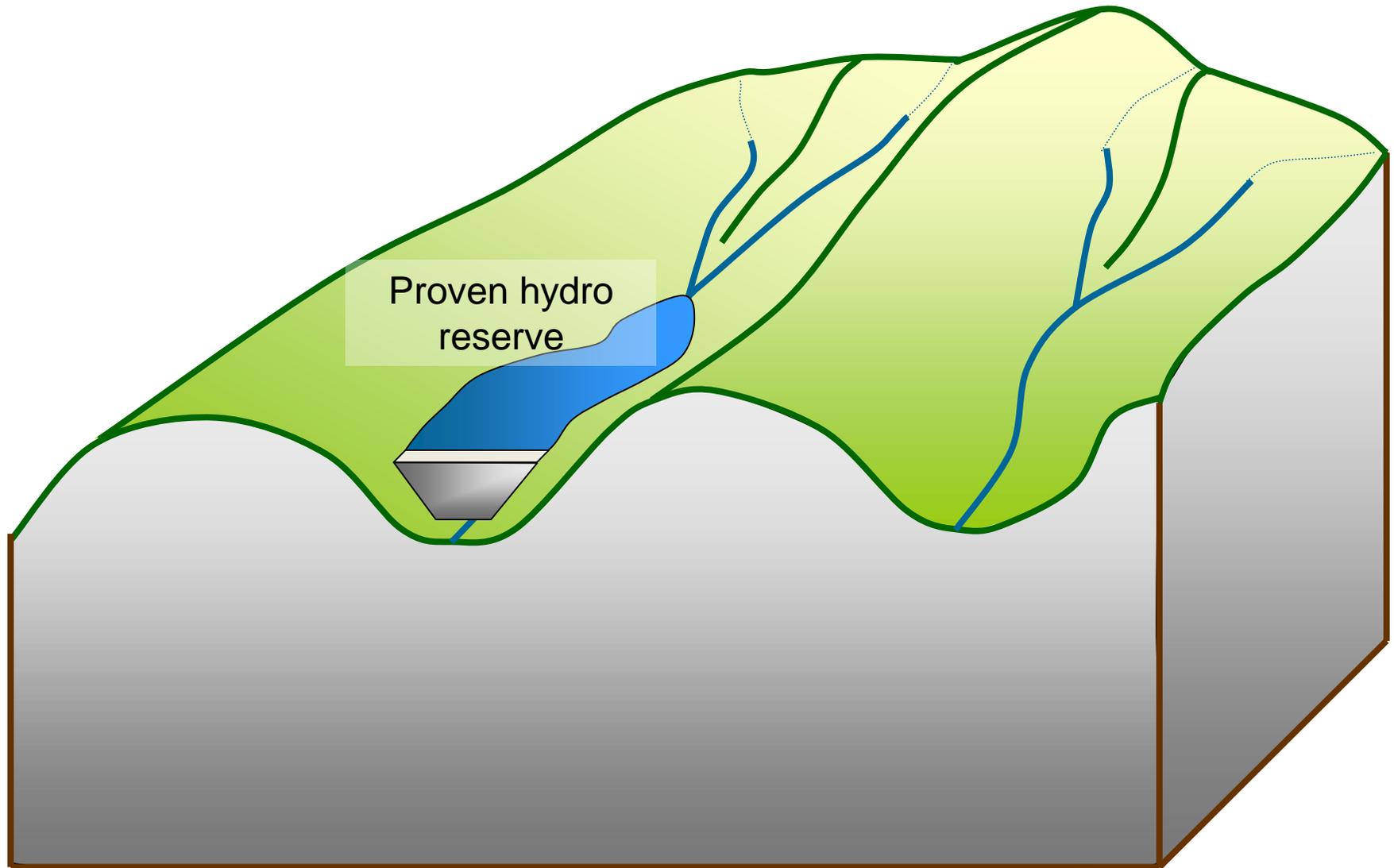
Emerging economies have the potential to **double hydroelectric production by 2050**, preventing up to 3 billion tonnes of CO₂ annually and fostering social and economic development (*2012 IEA Technology Roadmap for Hydropower*)

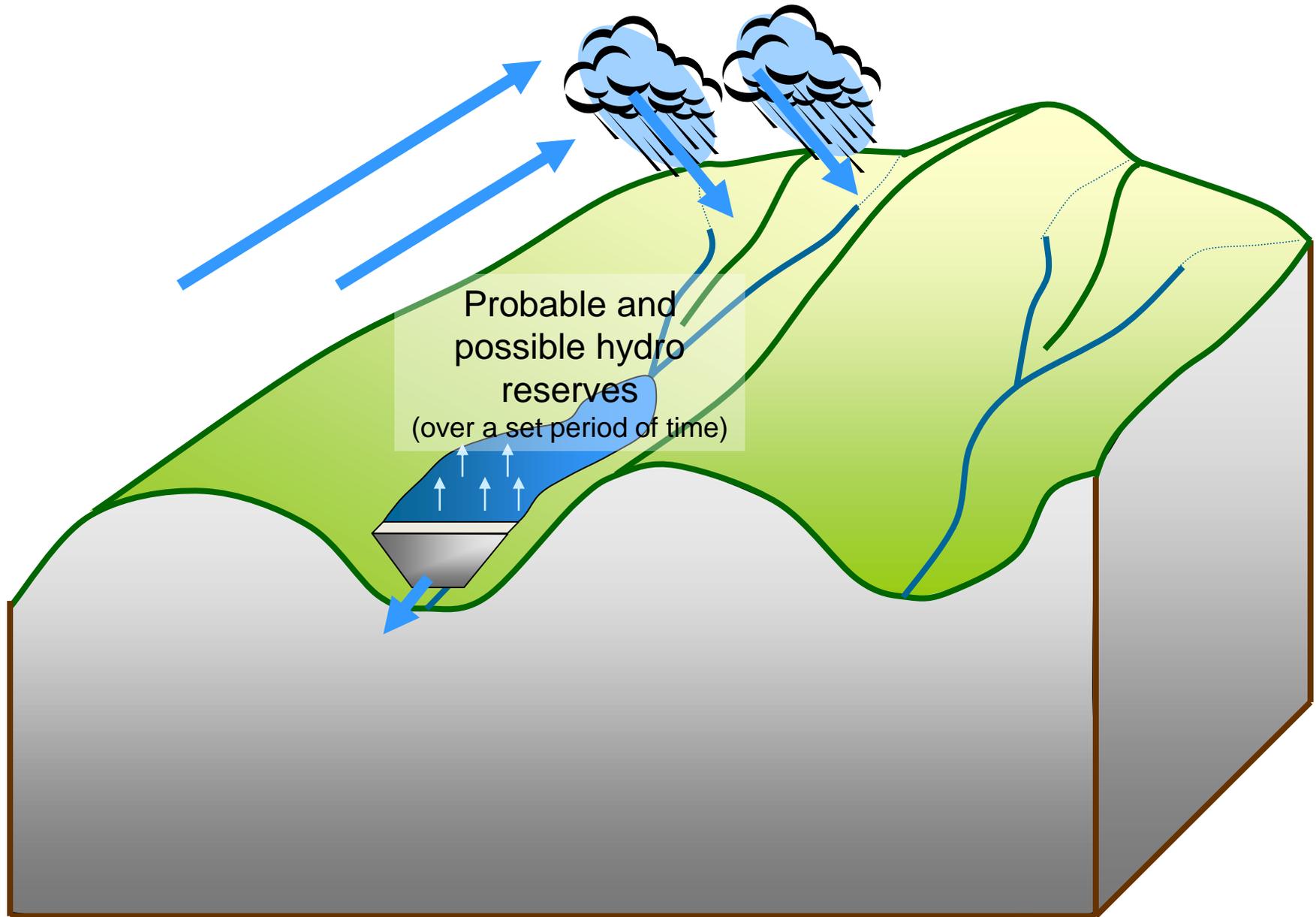


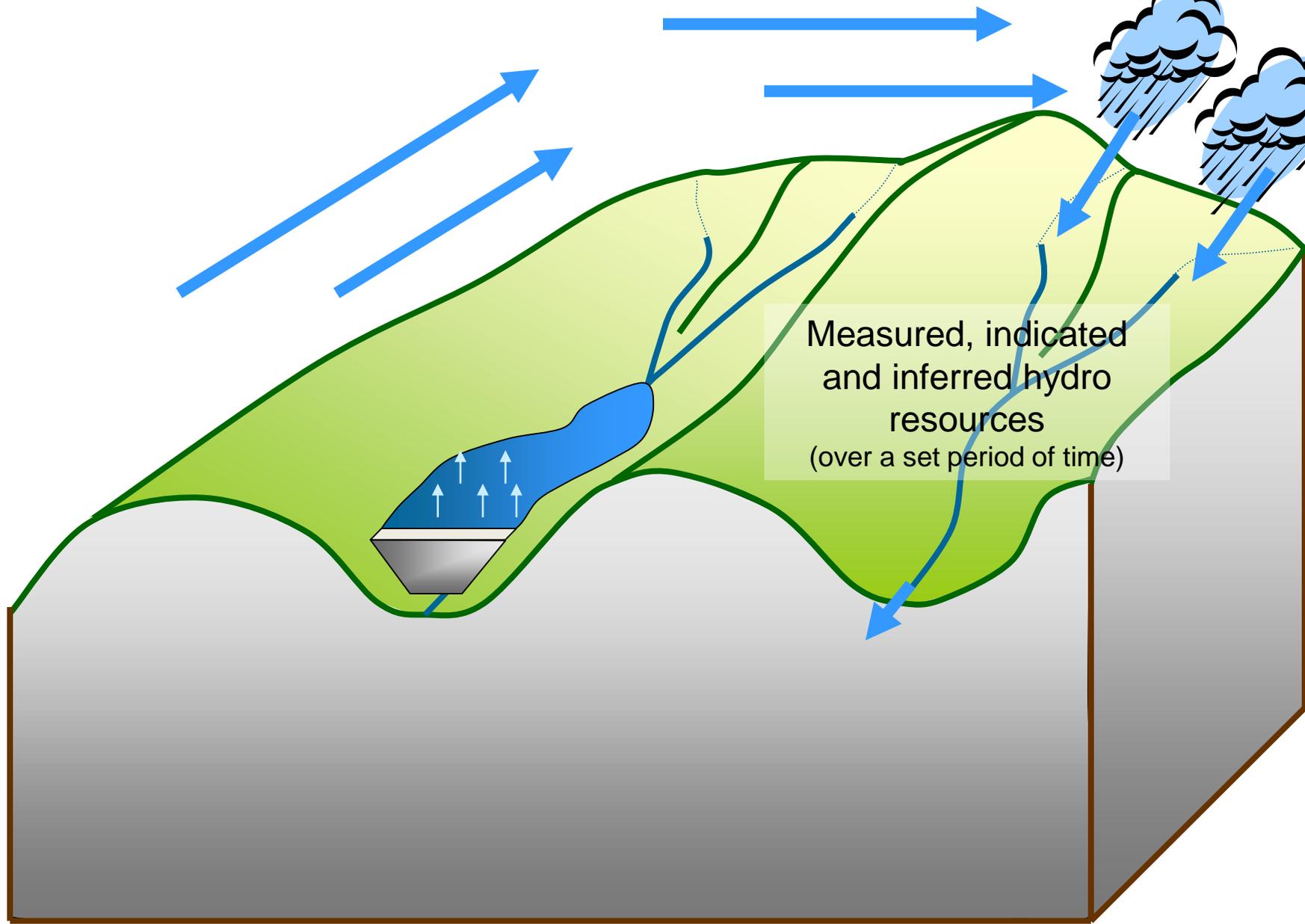
Example of Hydropower – UNFC Applicability

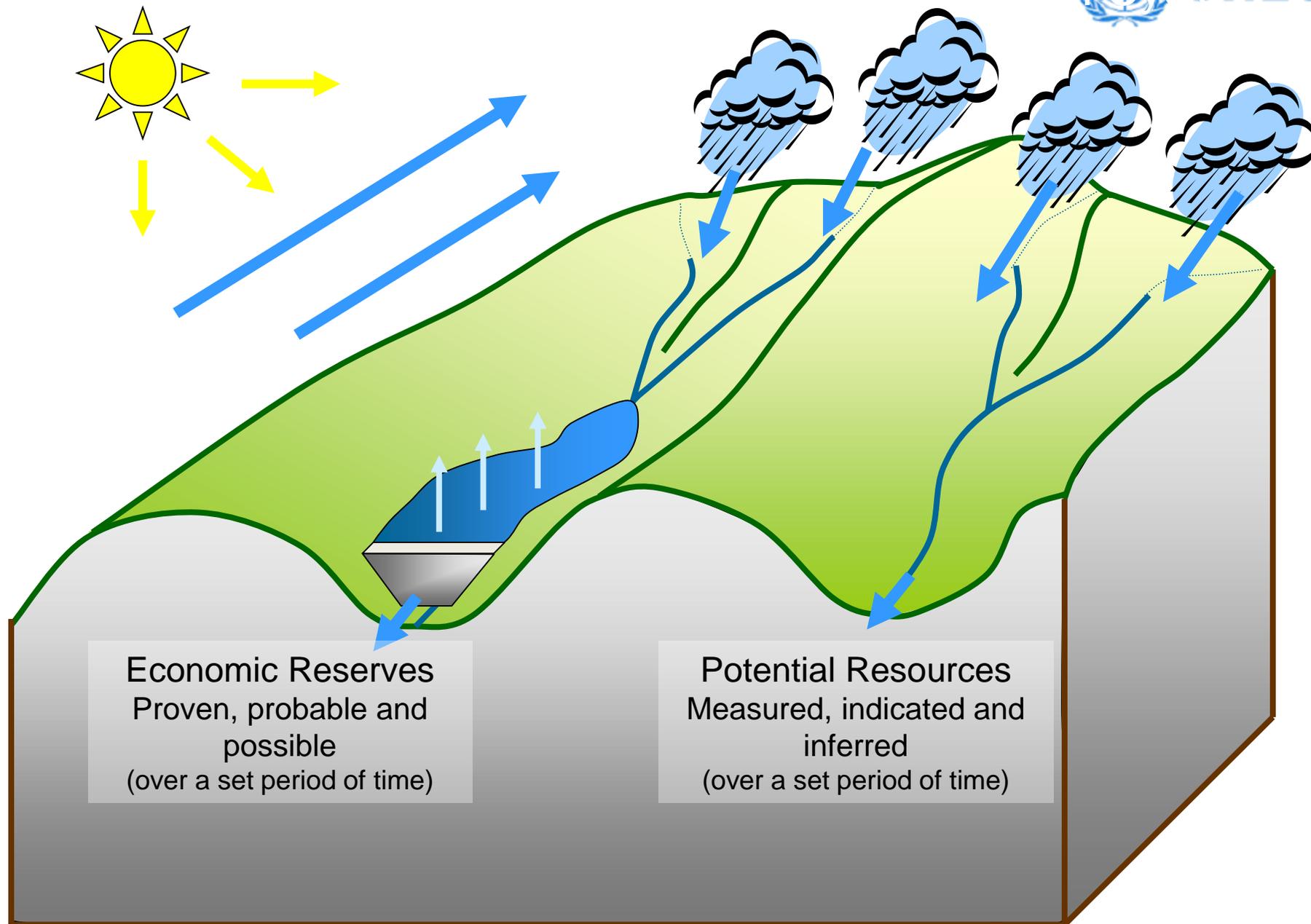












IHA – International Hydropower Association

- Non-profit, international organisation and membership association representing the global hydropower sector
- IHA has members in more than 80 countries, including over 100 corporate and affiliate members working across sectors such as electricity generation, water management, construction, engineering and related industries
- IHA also partners with international organisations, research institutions, governments and civil society.
- IHA's mission is "**to advance sustainable hydropower by building and sharing knowledge on its role in renewable energy systems, freshwater management and climate change solutions**"

IHA Chief Executive Invitation Letter

Dear EGRC Members,

25 April 2017

The International Hydropower Association is pleased to invite a member of the UNFC Committee on Sustainable Energy's Expert Group on Resource Classification to attend the 2017 World Hydropower Congress, 9-11 May, in Addis Ababa, to participate in a scoping meeting to explore the next steps in developing the specifications for the application of the United Nations Framework Classification for Fossil Energy and Mineral Reserves and Resources 2009 (UNFC-2009) to Hydropower Energy Resources.

The World Hydropower Congress brings together hydropower decision-makers and professionals from around the world and strives to chart the course for sustainable hydropower development and operations over the coming decade, with the aim of ensuring reliable and resilient water and energy systems for all.

The event is an ideal opportunity to bring together some of the most influential minds within the hydropower sector to present to them the accomplishments of the UNFC Task Force and Working Groups over the past eight years and to describe the benefits of the UNFC-based resource classification system for decision makers.

IHA will convene this meeting, including the African Union, IRENA, IEA, IHA members and sponsors, to attract interest in contributing to the development of the specifications, as well as the case studies. It is our hope that this meeting in Addis Ababa can mark the first steps towards kicking-off the hydropower specifications and hope to be able to report positive developments during the next EGRC meeting in 2019.

Sincerely,

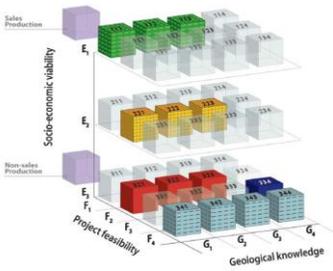
Richard Taylor

Chief Executive

International Hydropower Association

The journey to a UNFC-based Hydropower Classification is starting

- Q1 2016 – First discussions with IHA representatives in Sutton, UK
- 7 April 2017 – Meeting/teleconference between UNECE and IHA representatives including IHA Chief Executive in Sutton, UK
- 26 April 2017 – Report to EGRC
- 11 May 2017 – Meeting at Hydropower World Congress in Addis-Ababa addressing:
 - Accomplishments of REN Workgroup to date
 - Description of use and benefits of UNFC-based resource classification
 - Outline of the process of developing the Hydropower Specifications
 - Roles & responsibilities of parties interested in contributing to the Hydropower Specifications
 - Importance and role of case studies



Thank you for
your attention!

Questions ?

