

Sustainable Small-Scale Hydropower in Local Communities

IEA Hydro has conducted an international survey of sustainable small-scale hydropower projects which can be used as models of "Good Practice" for future developments.

Projects were identified as successful examples if they have been proven to be economically and socially sustainable in their local communities from commissioning to the present time.



Use of Irrigation Channel
(Japan)



Landowner's Power Plant
(Norway)



Local Employment
(Philippines)



Underground Power Plant
(Germany)



Fishway
(UK)

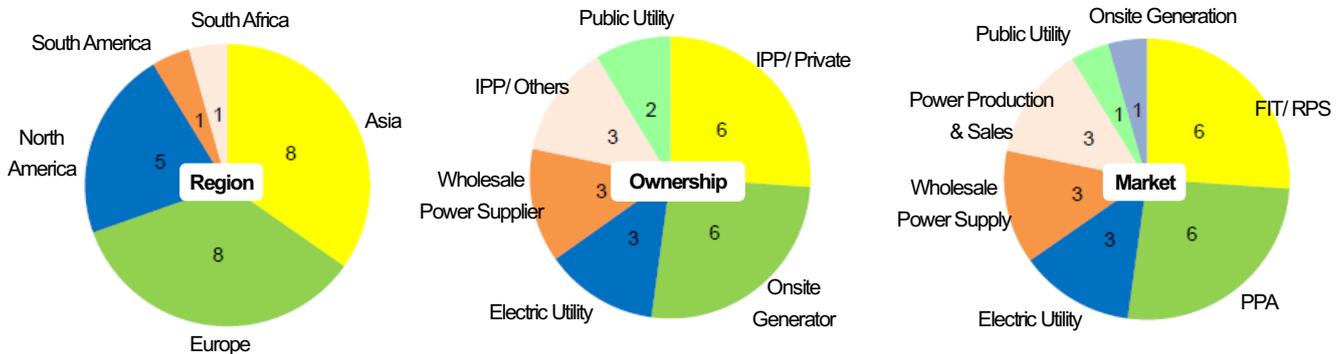


Education
(USA)

To access and download the Summary Report and Case Histories,
visit the IEA Hydro website at www.ieahydro.org

Collection of Good Practices

- 23 Good Practices from 10 countries, in 6 types of ownership and in 7 types of Market.



Effective Measures for Sustainability

- Well balanced economic and social sustainability can be found in most of the Good Practices.

Economic Sustainability

Recovery of Initial Investment Cost (IN)

- Investment grants, innovative technology, design optimization, use of existing facilities...

Paying for O & M Cost / Gaining Profit (OM)

- Long-term power purchase agreement, Incentive schemes, O & M rationalization...

Social Sustainability

Economic Benefit (EB)

- Industrial development, employment creation...

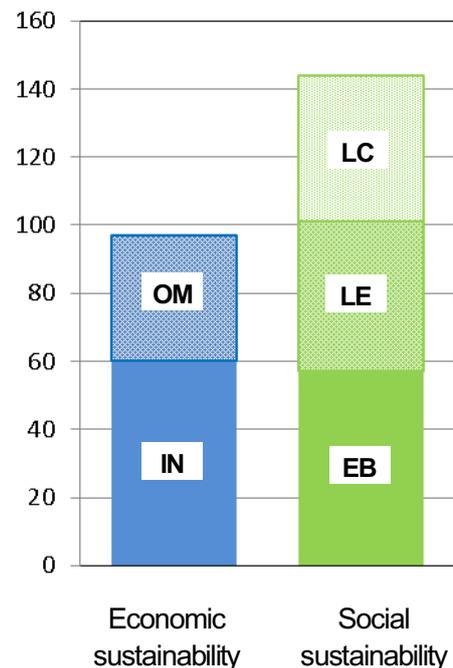
Contribution to Local Environment (LE)

- Natural environment and landscape preservation, infrastructure improvement...

Contribution to Local Community (LC)

- Local resource development, education, inter-regional human exchange...

Cumulative total number of effective measures among all of the Good Practices



Recommendations

- More attention to the importance of social sustainability in hydropower development.
- Hydropower development addressing “sustainable small-scale hydropower in local communities”.
- Good Practices should be utilized to provide opportunities for general public to renew their appreciation of the value of hydropower generation.
- Information should be further accumulated and organized for sharing among hydropower experts.