FLERBRUK AV MAGASINER I ET ENDRET KLIMA

UTFORDRINGER, MULIGHETER OG ERFARINGER

Seminar 4.februar 2016
Åse Roen
Statkraft vision
Providing pure energy
Statkraft’s global presence

Installed capacity
18,641 MW
99% renewable energy

Power production
56 TWh
4,200 employees
(Source: National Center for Atmospheric Research. 2011)
22th of June 2014, Norway

Balkan 2014

UK 2014

5th of August 2014 – flash flood in Hiroshima, Japan
Historically, hydropower has acted as a catalyst for economic and social development by providing both energy and water management services. (…)

Multipurpose hydropower can be a tool to mitigate both climate change and water scarcity.
Sustainable multipurpose hydro can play a key part of the solution to climate change and sustainable development

World developments

- Economic and social development
  - Increased population, production and affluence
- Climate change
  - Increased water scarcity and more frequent extreme weathers

Challenges

- Mitigation
  - Increased need for clean, flexible and reliable energy
- Adaptation
  - Increased need for water and water management
- Sustainability
  - Need for sustainable development that balances social, environmental and economic needs

Solution

- Sustainable multipurpose hydropower
The multi-benefits of sustainable hydro are not fully acknowledged, and the incentive mechanisms to unlock its full potential are lacking. Hydropower provides additional benefits... that will become increasingly important as a result of climate change and economic development.

- **Irrigation**
  - Increasing **food demand** from a growing and more affluent world population
  - Increasing **drought** frequency in several countries

- **Flexibility in energy system**
  - Large-scale deployment of **intermittent renewables** in several countries

- **Flood prevention**
  - Increasing frequency of **floods** in several countries

- **Drinking water**
  - Increasing **drinking water** demand from a growing world population

Current incentive mechanisms do not allow for a way to maximize the net social and economic returns of the different purposes of hydropower.
BETTER HYDRO, BETTER CLIMATE
A JOINT INITIATIVE

Introduction document
December 2015
The initiative will articulate and communicate the ‘win-win’ value proposition of multipurpose hydropower

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<th>Step 1: Develop report</th>
<th>Step 2: Share &amp; discuss</th>
<th>End goal</th>
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<tr>
<td>Articulate the case for sustainable multipurpose hydro</td>
<td>Engage with key stakeholders</td>
<td>Increased awareness of the benefits of multipurpose hydro</td>
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<tr>
<td>a) The role of hydropower in the context of economic development and climate change mitigation</td>
<td>Engage with key policy makers, financing institutions and other key stakeholders</td>
<td>Demonstrate industry best-practices for sustainable hydro</td>
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<td>b) Additional benefits of multipurpose hydro and role as adaptation measure</td>
<td>Present report at conferences and seminars</td>
<td>Highlight mechanisms to increase the net social and economic benefits</td>
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<td>c) Costs and benefits of sustainable hydro</td>
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<td>d) Mechanisms to facilitate and incentivize sustainable multipurpose hydro</td>
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Step 1: Develop report

Step 2: Share & discuss

End goal

- Increased awareness of the benefits of multipurpose hydro
- Demonstrate industry best-practices for sustainable hydro
- Highlight mechanisms to increase the net social and economic benefits
FOU
NY KUNNSKAP
ØKT FORSTÅELSE
BEDRE VERKTØY
The Statkraft Way

- Bærekraftig utvikling
- Internasjonal god praksis
- The Stage Gate Model

Hydropower Sustainability Assessment Protocol
The Hydropower Sustainability Assessment Protocol

A framework to assess sustainability at all stages

A consistent, globally-applicable methodology, and a neutral platform for dialogue

Over 20 clearly-defined sustainability topics

Governed by a multi-stakeholder Council and Terms and Conditions
Cross-cutting Issues

- Climate change
- Human rights
- Gender
- Grievance Mechanisms
- Integrated Water Resource Management
- Legacy Issues
- Livelihoods
- Multi-Purpose Projects
- Transboundary Issues
- Transparency
HSAP – mer informasjon tilgjengelig på www.hydrosustainability.org
THANK YOU

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