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# Hydropower in Iceland and its sensitivity to climate anomalies

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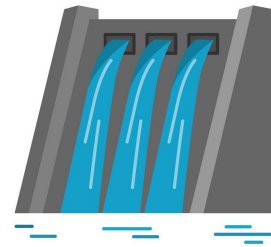
## Unexpectedly warm and wet end of summer 2015

After a cold anomalous period in early summer 2015 in Iceland, September was anomalous warm, causing the cancellation of a previous decision to curtail production.



## Increased glacial runoff

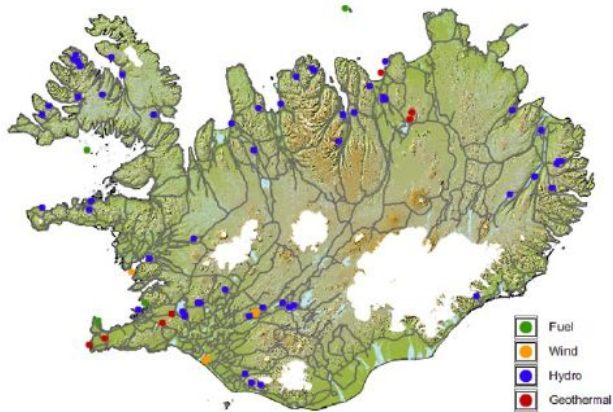
It is projected that glacial runoff will keep increasing during the next few decades because of global warming.



## Unused hydropower potential

Climate adaptation is a must for the Icelandic national hydropower company that highly relies on glacial rivers.

# Impact of climate change on hydropower generation in Iceland



- According to the International Hydropower Association (IHA) Hydropower Status Report, glacial runoff is increasing in Iceland due to increased glacial melt caused by climate change. Icelandic Hydropower plants are now maximizing their current output capability and often during summer months the additional flow is bypassed and therefore gone unused.
- Landsvirkjun has been carefully watching data compiled from river flows and incorporates these climate trends into driving their power management plans. According to the IHA, “Landsvirkjun also uses the long-term perspective provided by climate modelling to design and adjust existing and proposed new projects to take advantage of anticipated increases in flow rates”.

# CHALLENGES



- **determining who from the group will contribute to the case study**
- **finding a weather event to focus on**
- **contacting Landsvirkjun - no answer**
- **communication in the group - different time zones and expectations**