## ÖLFUS CLUSTER

Páll Marvin Jónsson



## ÖC STAFF



- Páll Marvin Jónsson Director
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- Kolbrún Hrafnkelsdóttir Project leader Green Industry Park
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### ÖC board of directors - our policymakers/mentors

- Áshildur Bragadóttir
  - Innovation and Development Manager, Lbhí
- Unnur Brá Konráðsdóttir
  - Ministry of the Environment, Climate and Energy
- Elliði Vignisson
  - Mayor, Ölfus
- Grétar İngi Erlendsson
  - Marketing manager, Black Beach Tours
  - Chairman of the town council of Ölfus
- Hafsteinn Helgason
  - Director of Research and Development, Efla
- Jóhannes Gíslason
  - Head of Sales and Marketing, GeoSalmo ehf.
- Jens Garðar Helgasons
  - Executive Director Laxa ehf.

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- Páll Marvin Jónsson
  - Director
- Kolbrún Hrafnkelsdóttir
  - Project leader Green Industry Park













## 736 km<sup>2</sup> Population 2725

S. ra

Ölfus

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MUNICIPALATY

6-7% increase in 2022 and 2023



Árborg

Hveragerdi



# **GIP-Ölfus**

Within Ölfus general plan a 579 hectare of land dedicated to Green Industrial Park.

Focus on sustainability and circular economy pathways.

The aim is to create a community of businesses seeking enhanced environmental and economical performances through collaboration in managing resources and waste issues.



• 4620 hectares of land for forestry and carbon sequestration.

Híðardalsskóli Breiðabólstaðu

• Total carbon sequestration of about 33,000 tons per year.

Projected lunched in 2016 in cooperation between the State Forestry and the Soil Conservation Service of Iceland and the municipality of Ölfus Tengivirki Þorlákshöfn Vatnsból Selfðssina II

ÞÓR Landeldisstö

Nýtt Vatnsbó

Land planning is in progress for Green Industrial Parks and integration with land reclamation and forestry in Thorlaksskogar











### Groundwater

### High temperatur zone

Low temperature zone

## Optimal wind profiles (wind capacity

factor around 60%)

The municipality of Ölfus is rich in natural resources







# Harbor

- Constructions started in 2021
- 4 billion ISK constructions in two years
- Import/export harbor that has already proven its opportunity's. Will be able to service bigger vessels (180 m long and 35 m width) with not so much cost. Good construction options on land in relation to the harbor.

# **IRIS 2022**

From Galway in Ireland to Porlákshavn in Iceland

Two data cables connected Iceland to Europe, FARICE-1 from Seyðisfjörður (2004) DANNICE from Landeyjahöfn (2009)

#### IRIS

A new fiber optic submarine cable will improve the speed of connections to Dublin, the UK, Europe and the US.

Νυυκ

	DUBLIN	LONDON	NEW YORK
Reykjavik / Iceland (current)	26 ms	18.9 ms	50 ms
Lulea / Sweden	24.7 ms	18.7 ms	52.5 ms
Hamina / Finland	22 ms	16 ms	47 ms
IRIS/Thorlakshofn	10.5 ms	14 ms	36 ms



NEWFOUNDLAND & LABRADOR

## Fibers in use by Farice three paths from the CLS

#### Farice's South-West network

- New network infrastructure in 2002
- Farice's uses fibers from Ljósleidarinn ) <u>https://www.ljosleidarinn.is/en/</u> in this area
- The DWDM network is automatically restored to the Service POPs in N15 and V868 and is an extension of the submarine cables





#### Initial assessment report

for two Transmission lines from Hellisheiðavirkjun to Þorlákshöfn

- Kolviðarhóll að Sandfelli (Þorlákshafnarlína 2) 220 kV
- Orustuhóll að Sandfelli (Þorlákshafnarlína 3) 220 kV
- Sandfell að Þorlákshöfn (Þorlákshafnarlínur 2 og 3)



## Harbor – plans for the future



# Utilization and management of groundwater resources in the vicinity of Thorlakshofn

Complex groundwater system - Delicate balance of fresh- and saline groundwater



Groundwater abstraction

Reference locations Monitoring and Research wells











### Electrical grid of transmisson lines in the Southern region



The Transmission grid within the Southern region is divided in two sub-systems, the East Part and the West Part.

The West part consists of five lines wich are all 66 kV and connected to the main system (220 kV) through the Substation in Sogið.

The East and West parts are connected with

Selfoss line 2 (SE2).

## South region Transmission lines

Selfoss line 1 – Capacity 66 kV Thorlakshol

Thorlakshofn line 1 – Capacity 66 kV

Hveragerdi line 1 – Capacity 66 kV

Selfoss line 2 – Capacity 66 kV

Selfoss line 3 – Capacity 66 kV



#### LANDSNET

Sogid Substation – 220 kV

### https://kuula.co/share/NsORY?logo =0&info=0&fs=1&vr=1&sd=1&initlo ad=0&thumbs=1





