

Tækifæri Íslands Sem HPC þjónustuaðili

Iceland's Opportunity As HPC Service Provider

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Grand Hótel, Reykjavík, 22 Nov. 2018

High

Performance

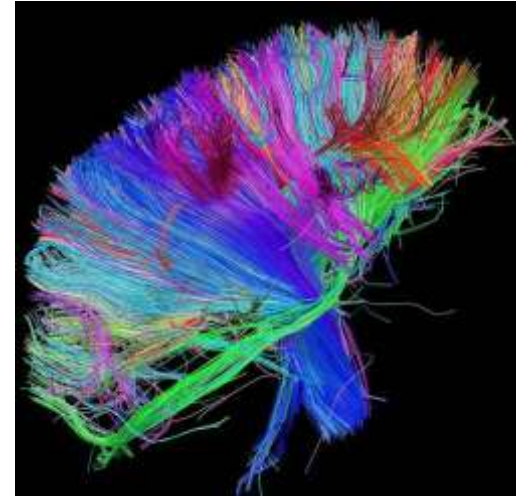
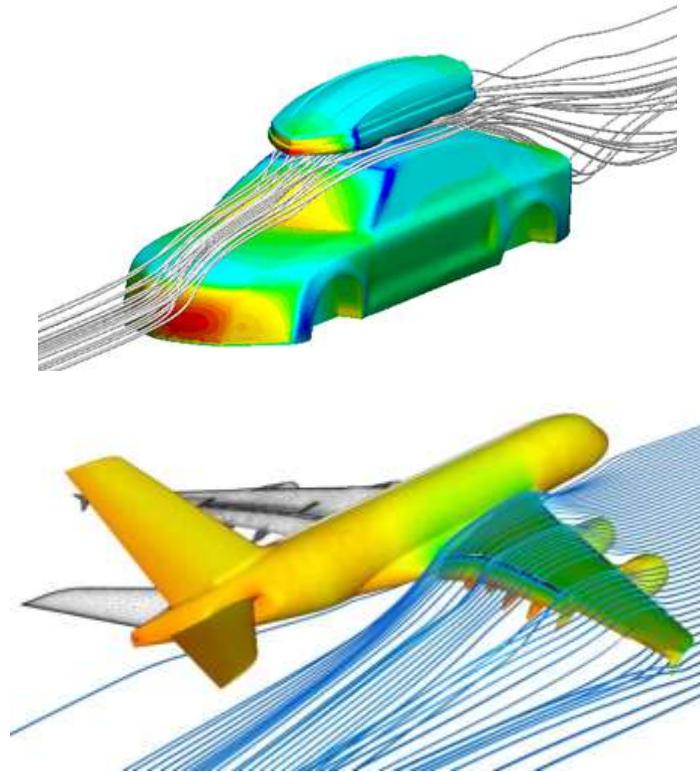
Computing

(HPC)

Used for solving advanced problems and performing research activities through computer modeling, simulation or analysis. Computer uses parallel processing to solve complex calculations fast.

HPC-Everything.

It can save your morning and your life.



Environment

Global warming: Data centres to consume three times as much energy in next decade, experts warn

416.2 terawatt hours of electricity world's data centres used last year was far higher than UK's total consumption

Tom Bawden Environment Editor | [@BawdenTom](#) | Saturday 23 January 2016 21:37 GMT | [2](#) comments



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The Independent Online

How viral cat videos are warming the planet

Datacentre web servers, such as those used by Google and Facebook, to blame for 2% of greenhouse gas emissions - about the same as air travel



Inside Google's data centre in Mayes County, Oklahoma. The firm's carbon footprint was equivalent to more than 1.7m tonnes of carbon dioxide in 2013. Photograph: Google/Rex



approx. 40l/100km



fully electric

The Issues HPC Cannot Solve



Extremely Energy Consuming

Needs A Lot Of Cooling



Expensive Investment and Running Costs

Creates Emissions

Needs Secure Power Supply



Further Expenses (Emission Tax)



HPC + Iceland = Ideal Match



Energy Consuming, Emission Creating

Expensive Investment and Running

Energy Availability

Energy Security Important

Cooling Is Essential

It Has To Be Safe!

100% Renewable Energy

Low-Cost Energy

Independent from world markets of energy

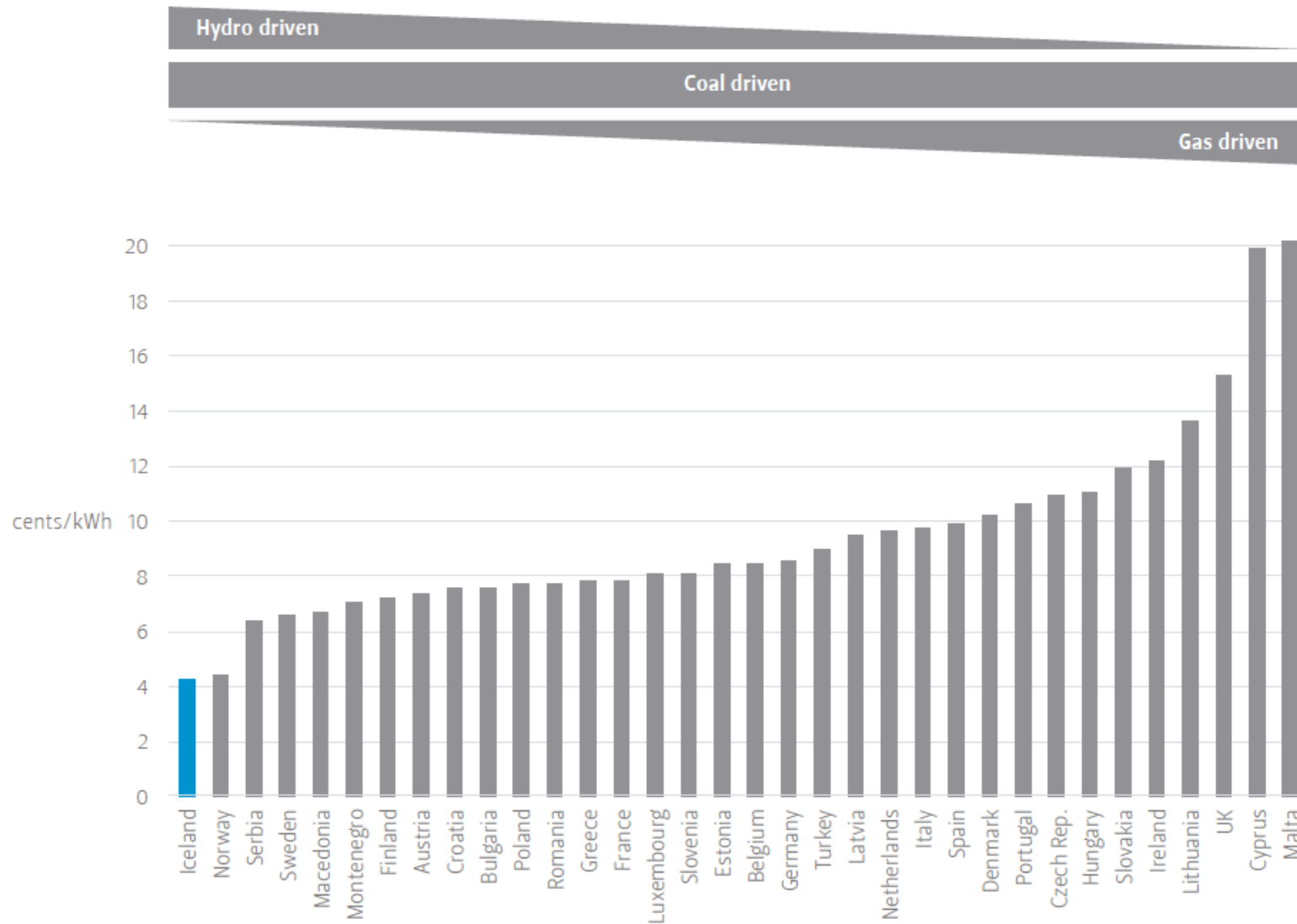
Over 90% energy surplus

Extremely robust power grid

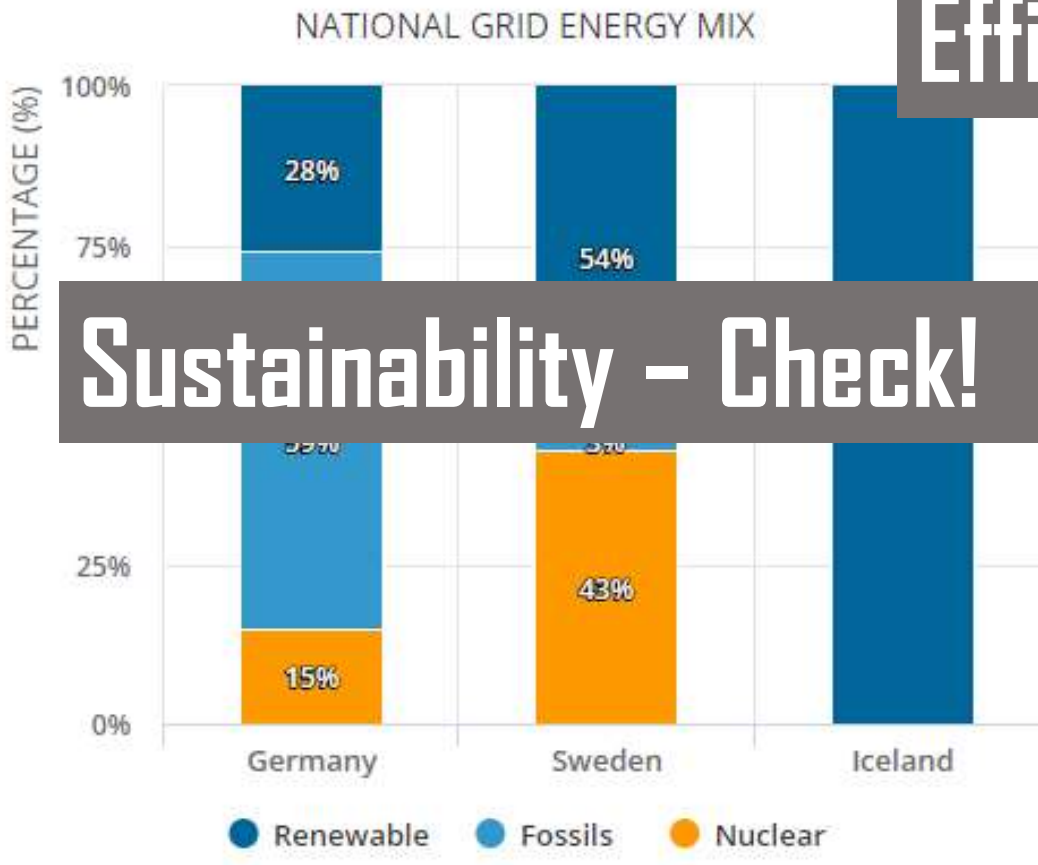
Free cooling all year due to climate

Unprecedented Safety

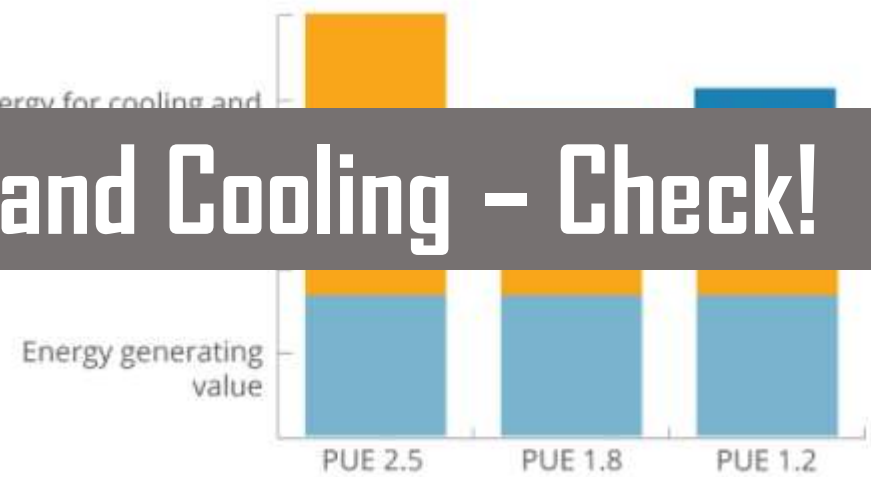
Figure 2: European power prices and energy source mix



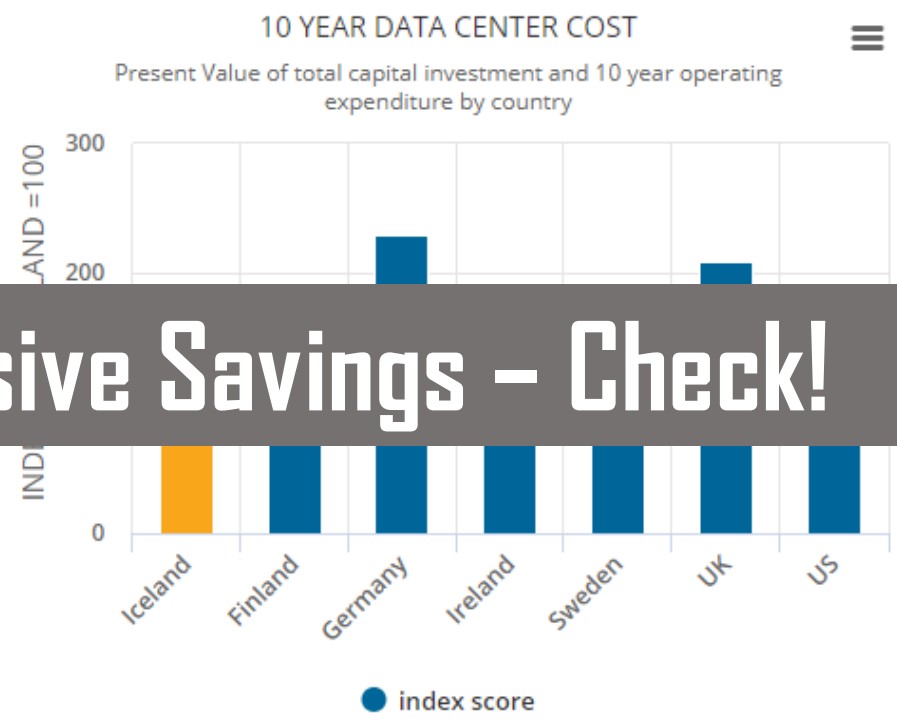
Efficiency and Cooling – Check!



Sustainability – Check!



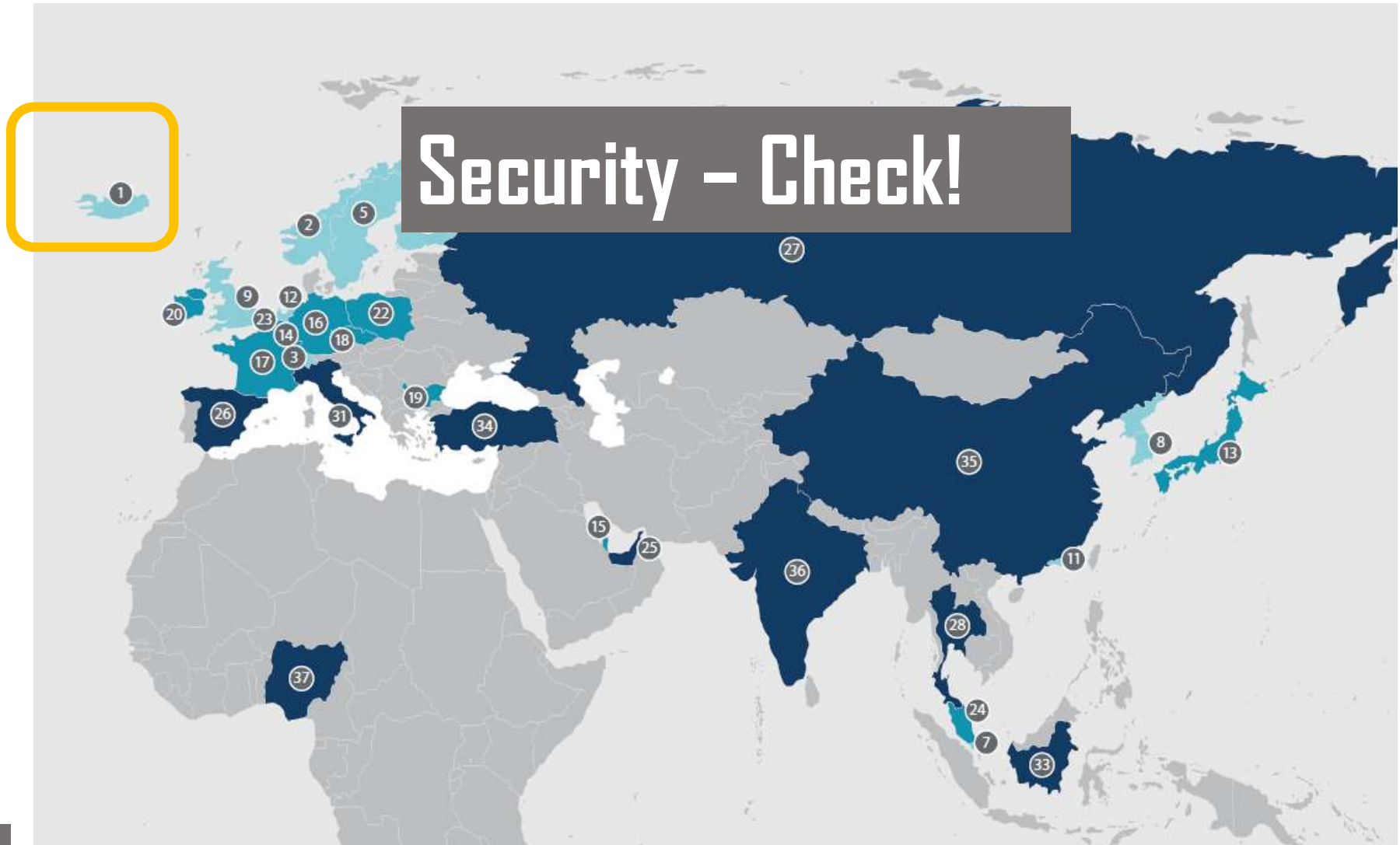
Massive Savings – Check!



Source: Invest in Iceland

Source: BroadGroup, Data Centre Analysis and Benchmarking of Iceland, June 2013.

Data Center Risk Map



Is Iceland Poised to Become a Data Center Paradise?

By Dave Levitan

Posted 6 Nov 2014 | 20:00 GMT



Iceland rated as the world's safest location for a data center

5 July 2016 | By Max Simola



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The UK and the US shift from top positions to number 9 and 10

Using HPCaaS For Your Next Breakthrough Fearlessly – The Options Are Limited

on OCTOBER 4, 2017 - ENTERPRISE/HPC

Tried and Tested.



Cost of HPC operations 82% less.



R&D budget from 40% to 15%



From 16p to 4p per kWh

What Does This Mean For Iceland?

Bold Value Proposition

Enormous Potential

Real, Long-Term Value To Country Economically and For Population

Community Improvement

Employment Growth in High Revenue Sectors

Creation of Low and High Education Jobs





In 60 Seconds:

HPC essential to business success in any industry.

Costs and emissions a fact.

Long-term solution essential.

Iceland ideal on the globe for HPC: sustainable and low-cost energy, free cooling, top safety and availability of energy.

Important for Iceland develop this golden opportunity as it will have a long-term positive effect on the country's economy and future stability.



Takk fyrir!

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