



## ECONOMIC

cheap, reliable power and natural sources of cooling all translate to cost reductions for Verne and its customers.



## ENVIRONMENTAL

Aside from using renewable energy and less of it, the center is built with steel rather than concrete, making the materials reusable at the end of its life.

# ZERO EMISSIONS DATA CENTER

→ A new data center runs on renewable energy and is naturally cooled by Iceland's cold climate.

## THE SOLUTION

! Location, location, location! Running your data center in a cold climate on renewable energy makes a world of difference. Data centers consume huge amounts of energy and as more and more services and communication go online, the demand for data center computing power increases steadily. Locating your data center in a climate, where it can be naturally cooled and supplied with renewable energy makes business and environmental sense.

Verne Global operates a zero emissions data center – designed and delivered by Colt – situated in Iceland for its cold climate and abundance of renewable geothermal and hydro-electricity. According to Verne Global, its data center is 100% powered by renewable energy and 100% cooled by the natural environment of Iceland, making the use of chillers and compressors redundant.

## WHY A SUSTAINIA100 SOLUTION?

? According to a recent study<sup>1</sup>, Data centers accounts for roughly 1.3 % of global electricity consumption. Ensuring natural cooling and renewable energy use in data centers has significant economic and environmental impact globally.

1. Koomey, J. (2011): "GROWTH IN DATA CENTER ELECTRICITY USE 2005 TO 2010". Stanford University. [www.analyticspress.com](http://www.analyticspress.com)



ICELAND



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## ECONOMIC

Packing more containers onto a single ship creates economies of scale that reduce costs and save fuel.



## ENVIRONMENTAL

Triple-E ships are designed to reduce CO2 emissions by up to 50% per container, compared to the industry average.

# A GREEN CONTAINER SHIP

→ Commercial shipping is a large contributor of air pollution accounting for 3-4% of man-made CO2 emissions worldwide. Larger ships, optimised for lower speeds and able to carry more cargo, can slash fuel.

## THE SOLUTION

! In 2011, Maersk Line secured an order to build 20 container ships bigger than anything currently at sea. The company's solution, the Triple-E (the "E" is for economy of scale, energy efficiency, and environmentally improved), established a new class of container ship. The capacity of each ship is to be 16% greater than the largest ship built thus far.

The ships are to be outfitted with currently available energy-saving and pollution-control technologies. For instance, the ships' hulls are optimised for lower speeds. An energy-efficient engine will be supplemented by a waste-heat recovery system that contributes to the ship's propulsion. The Triple E class will also be equipped with an energy-efficient ballast water treatment system, and made ready for eventual installation of a SOx scrubber. A "Cradle to Cradle Passport" ensures that when a Triple E ship reaches retirement its components can be safely disassembled and recycled.

## WHY A SUSTAINIA100 SOLUTION?

? Climate policymakers agree that concerted action must be taken to address maritime emissions. The Triple-E class is proof that shipping can be made more sustainable, cost-efficiently, using today's technology.



DENMARK



[www.worldslargestship.com](http://www.worldslargestship.com)