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The First Real World Computer

The Internet Computer Blockchain

Speaker

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You just downloaded this deck from cypherspace!

Blockchain URL

What ICP fixes for web3

Decentralized

0.01%

Tokens and tiny clips of data

Centralized

99.99%

Nearly all content and data, web serving & most logic

Decentralized

The devices and crypto keys of end users

We want to own and run service X

I built web3 service X ON blockchain

Wait! What?

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Cost of storing this deck on-chain

INTERNET COMPUTER	SOLANA	ETHEREUM
$0.04 / year	$826 / year	$533,000

Alien tech efficiency enables blockchain to store and process dynamic content like social profiles and chat, and files, using smart contracts

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Open Chat SocialFi

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The Internet Computer blockchain is now processing almost a billion transactions a day

10,000+

TX / second

850,000+

TX / day

https://dashboard.internetcomputer.org

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The volume of smart contract computation (i.e. blockchain usage) is measured by the cycles consumed

GROWTH IN CONSUMPTION OF CYLES (PAST 4 MONTHS)

550%

https://dashboard.internetcomputer.org

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Blockchain Singularity

When the majority of the humanity's online systems
and services run 100% on blockchain

Chain Key Crypto enables the Internet Computer to support **true web3**
with a fundamentally different design

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Environmental meltdown?

The opposite: the Internet Computer is a blockchain that can run compute more efficiently than traditional IT. The world can protect the environment by building on a blockchain

efficient · hackproof · unstoppable · autonomy

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An authentic early crypto project

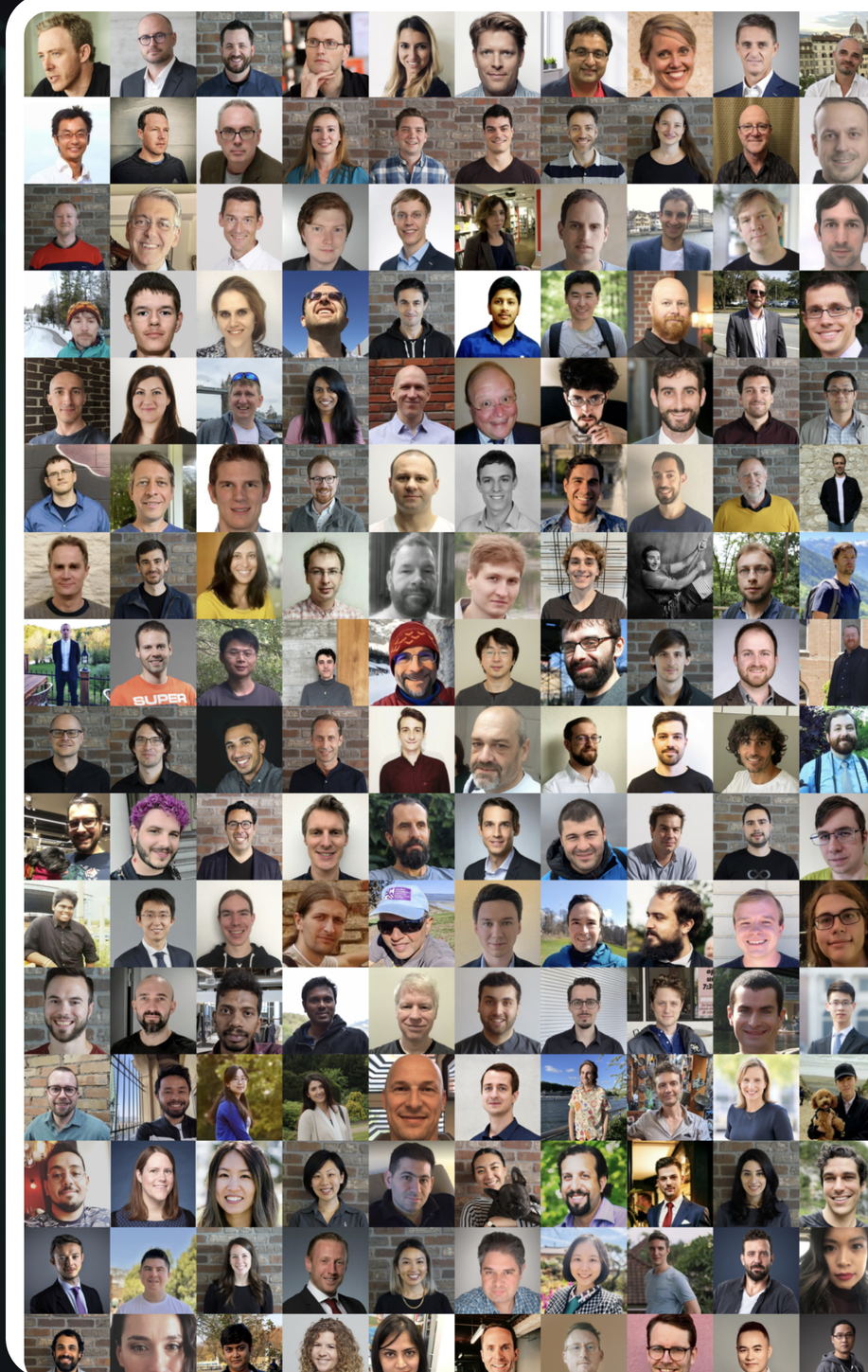
- DFINITY runs the largest team of top cryptographers in tech...
- It was founded in 2016 to continue World Computer research begun in 2015
- It became the largest employer of senior Google Research engineers
- It is a Swiss not-for-profit foundation
- Research centers in Zürich + SF

1600+
research papers

100 000+
academic citations

250+
technical patents

Google IBM facebook



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Imagine building on a blockchain that emits less CO_2 than traditional IT

Internet Computer is green

- ✓ Security
- ✓ Liveness
- ✓ Autonomy
- ✓ Censorship resistance
- ✓ Decentralization
- ✓ Programmability
- ⚡ HTTP
- ⚡ Chain Key TX

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Sustainability

Game changer

Energy Consumption

Lowest energy consumption per tx of any blockchain.

Autonomous Organizations

Self-Sustaining

World's largest DAO controlled network (NNS), with spin-off framework (SNS).

Funding Projects

Community Fund

Community driven and community funded! Over $5 million for devs building on IC

Scalability, Utility, and **Growth** with low carbon cost.

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Deep Dive: IC Energy Consumption
Achieving our sustainability goals

Measured the energy consumption of nodes in 17 different subnets

Extrapolated to all nodes

Methodology by Carbon Crowd
Audited by Fingreen AI

Average hourly energy consumption per node (kWh)	0.232
Number of active nodes	518
Number of all nodes	726
Annual consumption of active nodes (kWh)	1'052741
Annual consumption all nodes (kWh)	1'475'464

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Low Carbon footprint

Weighted the node average by the emissions factor of node location

Equivalent to 1.5 railcars' worth of coal burned

5,500 transactions per second
More than billion blocks

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During a single year, the IC was calculated to have

1,052,741 kWh

of energy consumption

275 tonnes

of carbon emissions

<100 average US homes

roughly equivalent

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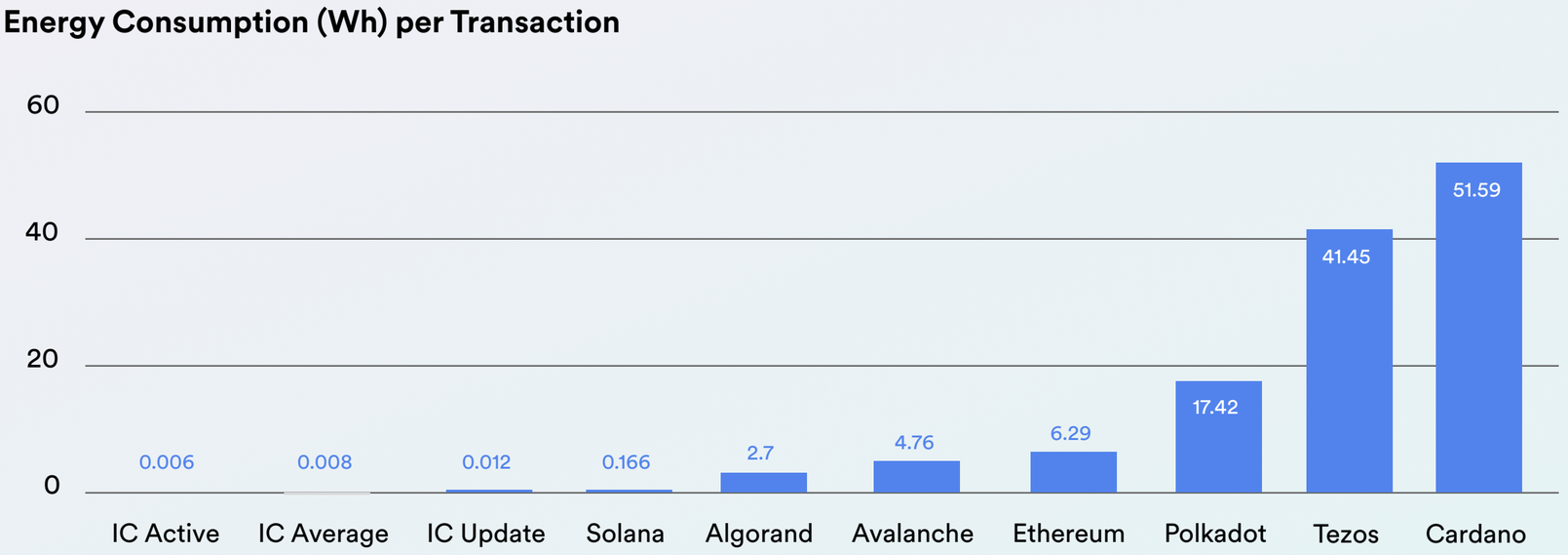
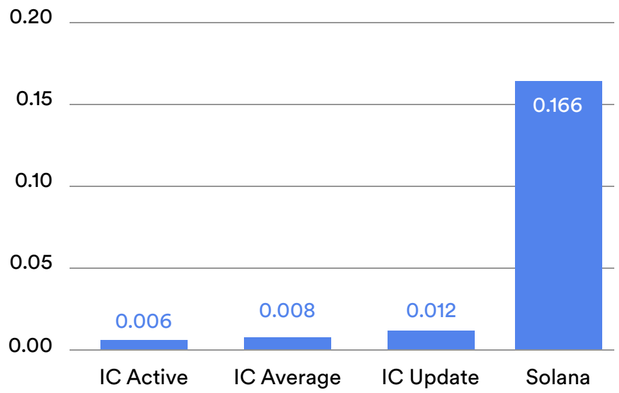
Internet Computer is the most sustainable by transaction

A lesson in scaling





29 x lower consumption than next best

6000 x lower consumption than Cardano

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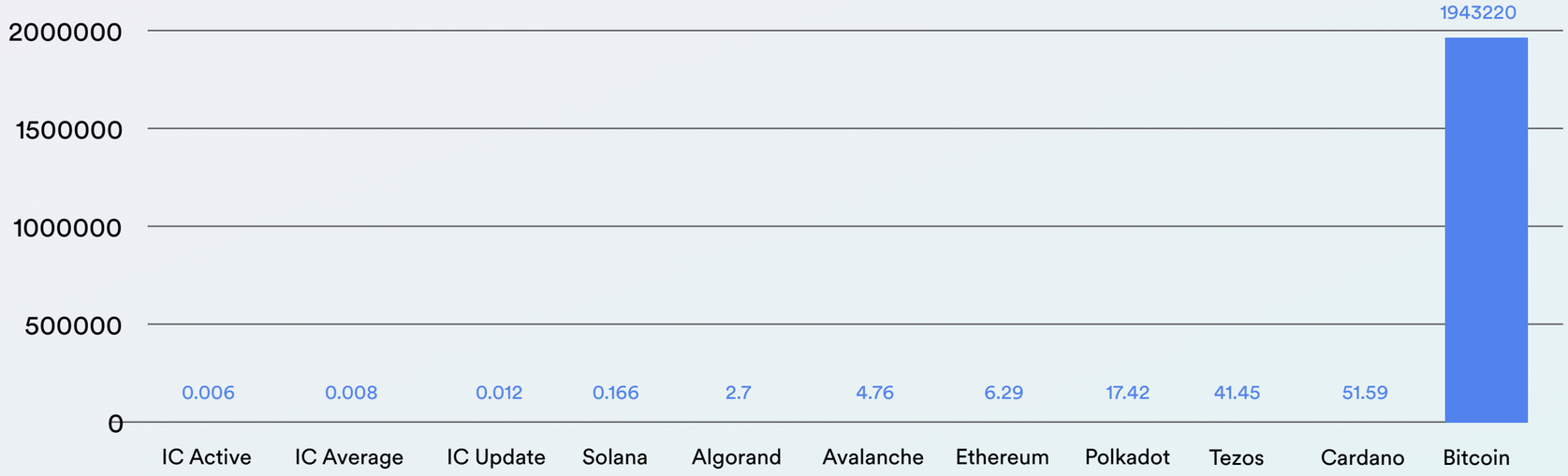
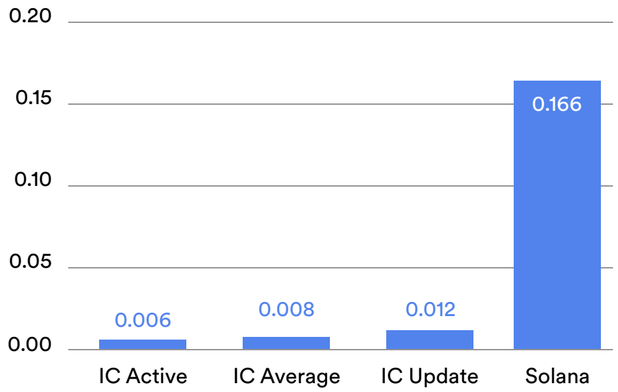
Internet Computer is the most sustainable by transaction

Another lesson in scaling





29 x lower consumption than next best

6000 x lower consumption than Cardano

350'000'000 x lower than Bitcoin

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Sustainable & Profitable

Real-time consumption

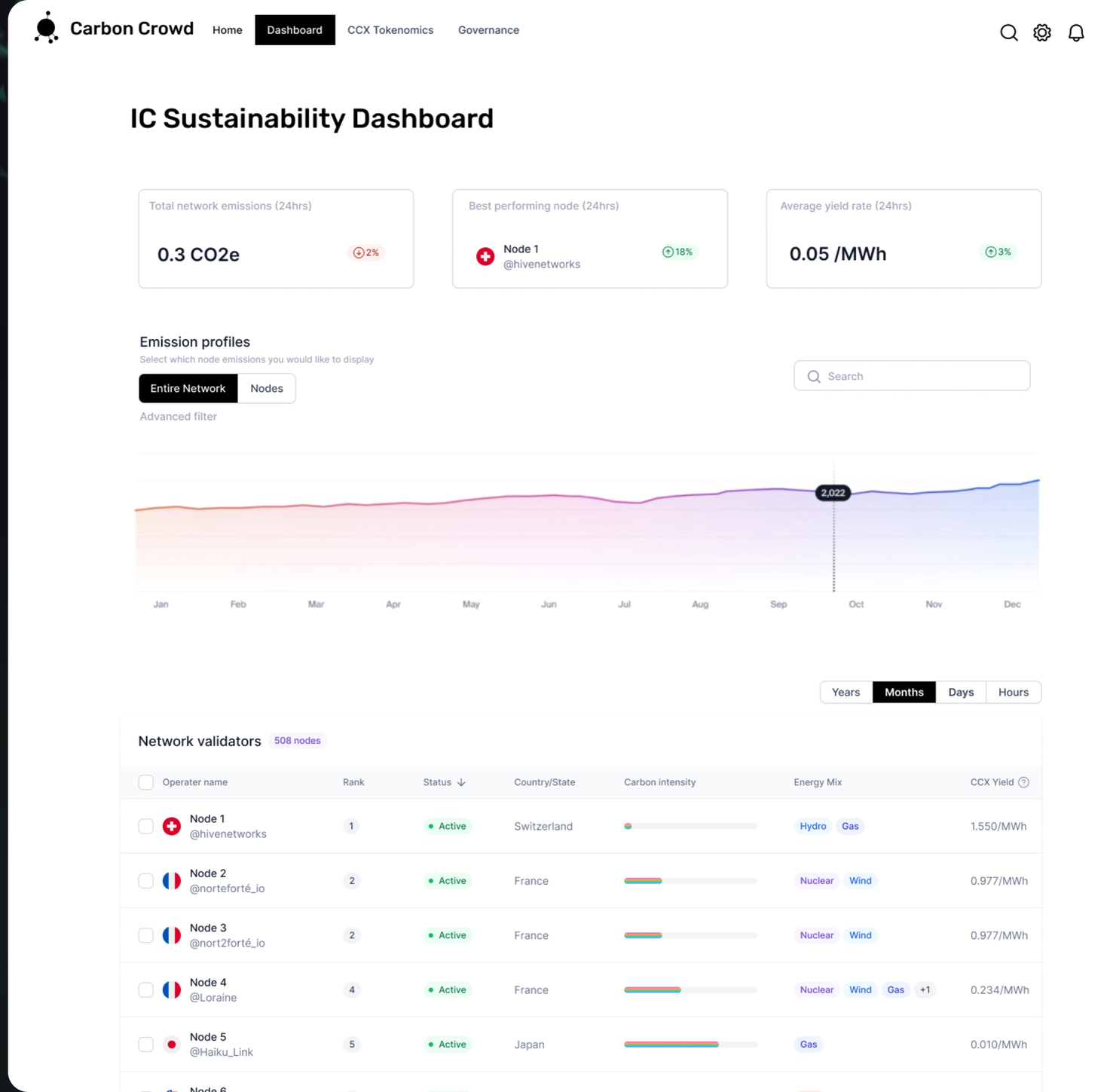
Develop real-time measurement of the IC's energy consumption and associated carbon footprint.

Green incentives

Establishing a leadership group to champion sustainability initiatives.

Decarbonized subnets

Development a fully decarbonized subnet on the Internet Computer.



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internetcomputer.org/features/sustainability

Sustainability report and latest news

#whenthelightscomeback