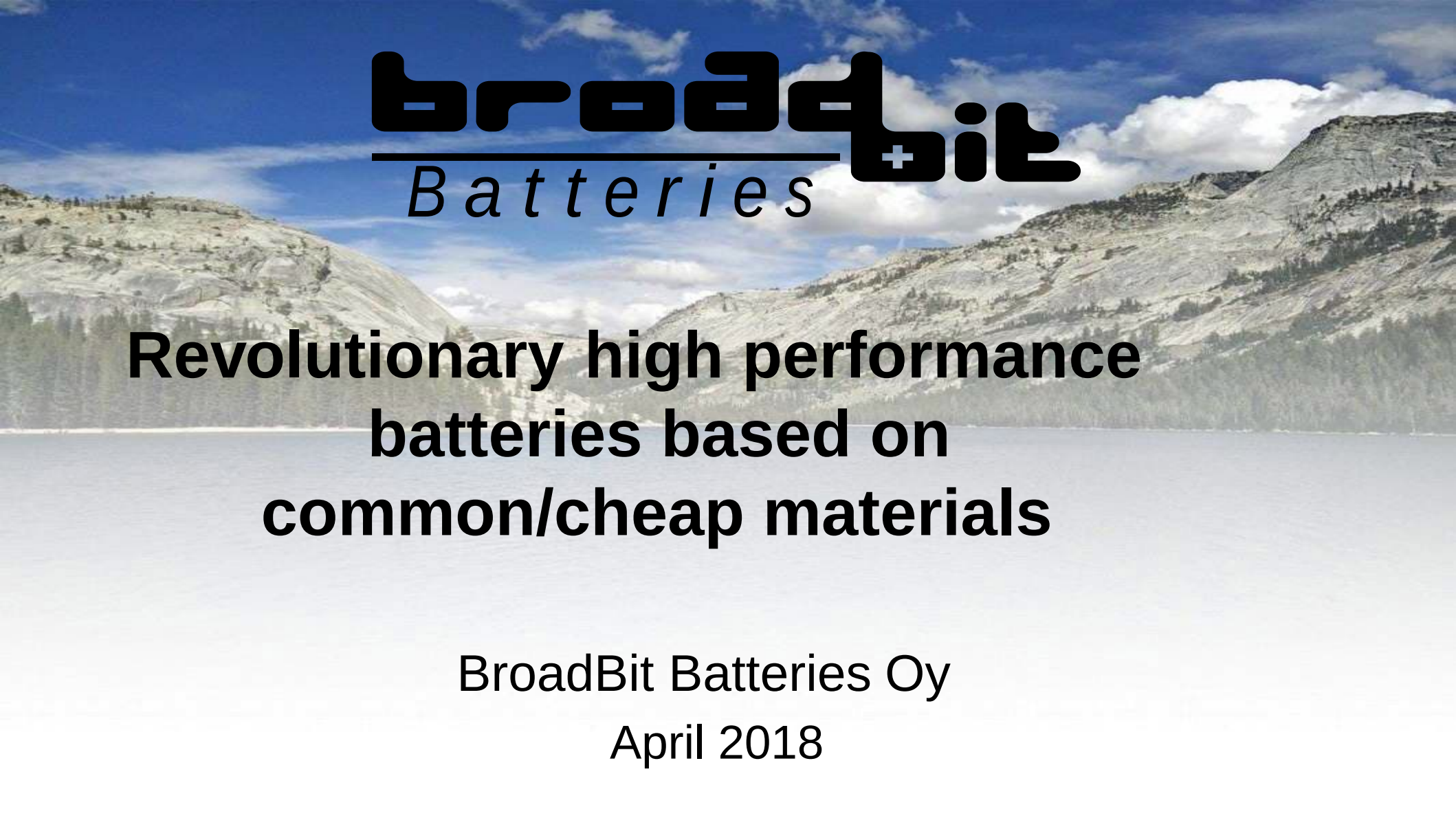


Revolutionary high performance batteries based on common/cheap materials

BroadBit Batteries Oy

April 2018

The Rechargeable Battery Market

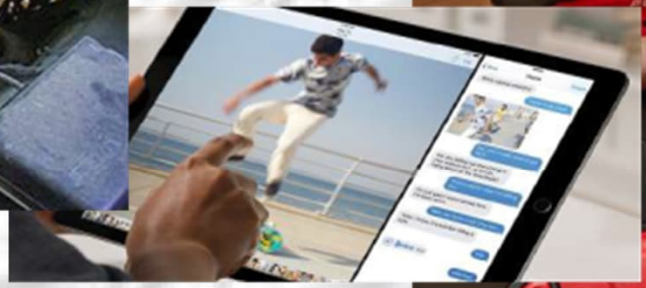


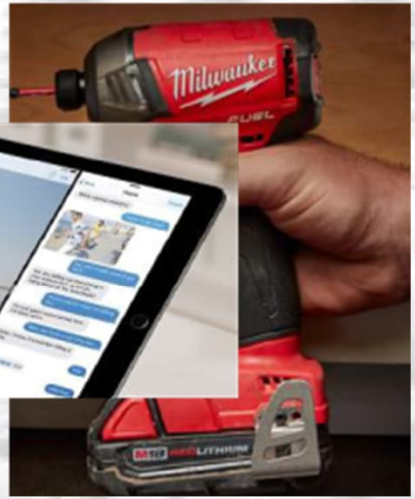
> 60 B$ today

Confidential and proprietary

The Rechargeable Battery Market







> 60 B$ today







> 1 T$ in 15 years

Confidential and proprietary

broadbit

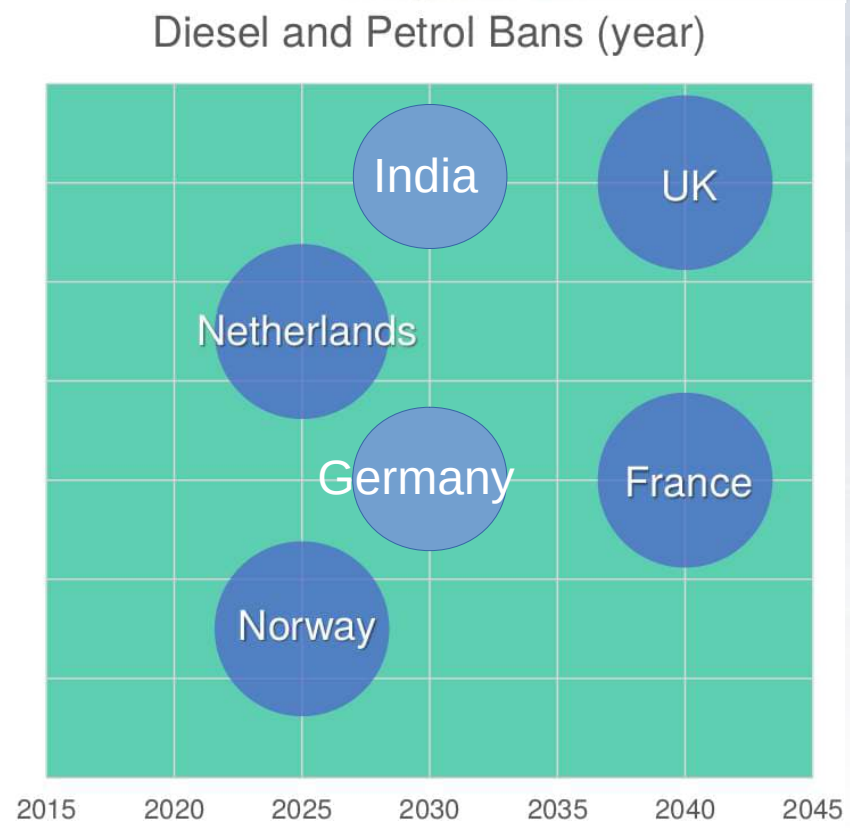
Growth is driven by regulations

Germany's Bundesrat Resolves End Of Internal Combustion Engine

Bertel Schmitt, CONTRIBUTOR
I have written about the auto industry all my life. FULL BIO
Opinions expressed by Forbes Contributors are their own.



German Transport Minister Alexander Dobrindt in a Tesla S at the 2014 AMI Auto Show (Photo: Jens Schlueter/Getty Images)



Confidential and proprietary

Current battery tech limits market

Existing batteries are:

High Cost

Poor Performance

Limited scalability

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BroadBit's unique solution

Revolutionary principle

Salt (NaCl)



Coal (C)



Low cost raw materials

Sulfur (S)



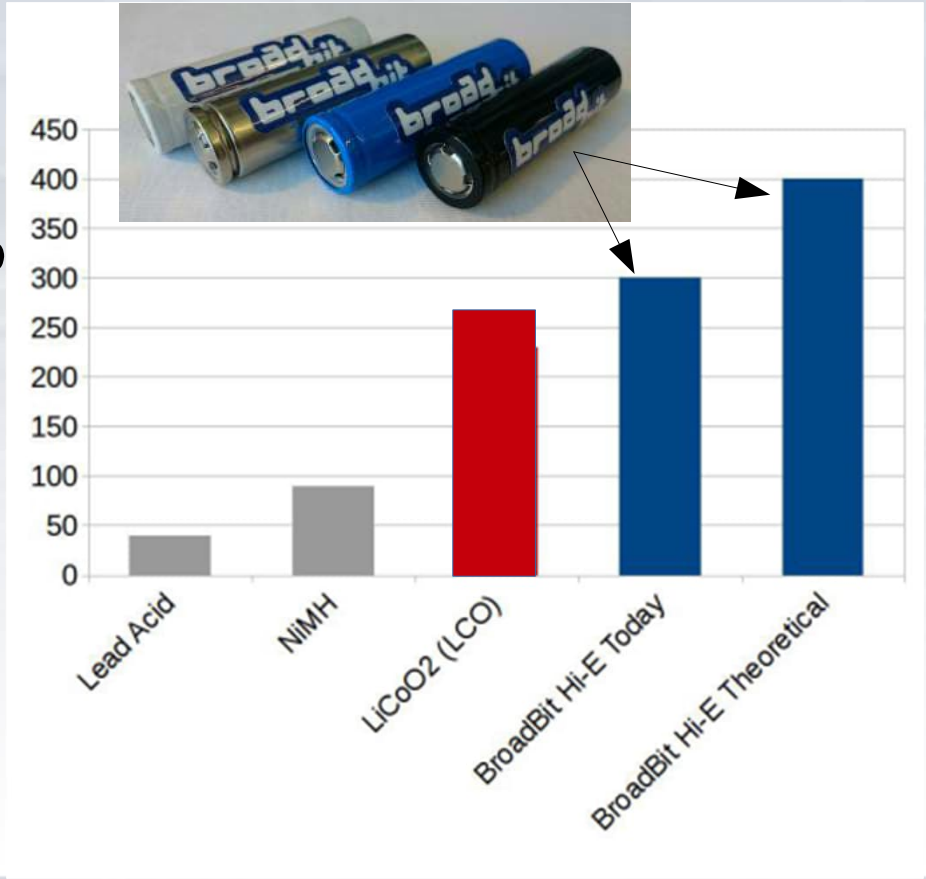
Sand (SiO_2)



1st patent granted and multiple additional pending

Confidential and proprietary

BroadBit Sodium batteries are better



Cheap and abundant materials

Unprecedented performance

Simple Manufacturing

Non-flammable and robust

Third party verified

Confidential and proprietary

BroadBit is better and cheaper

> 25% lower cost per kg

> 25% higher capacity per kg



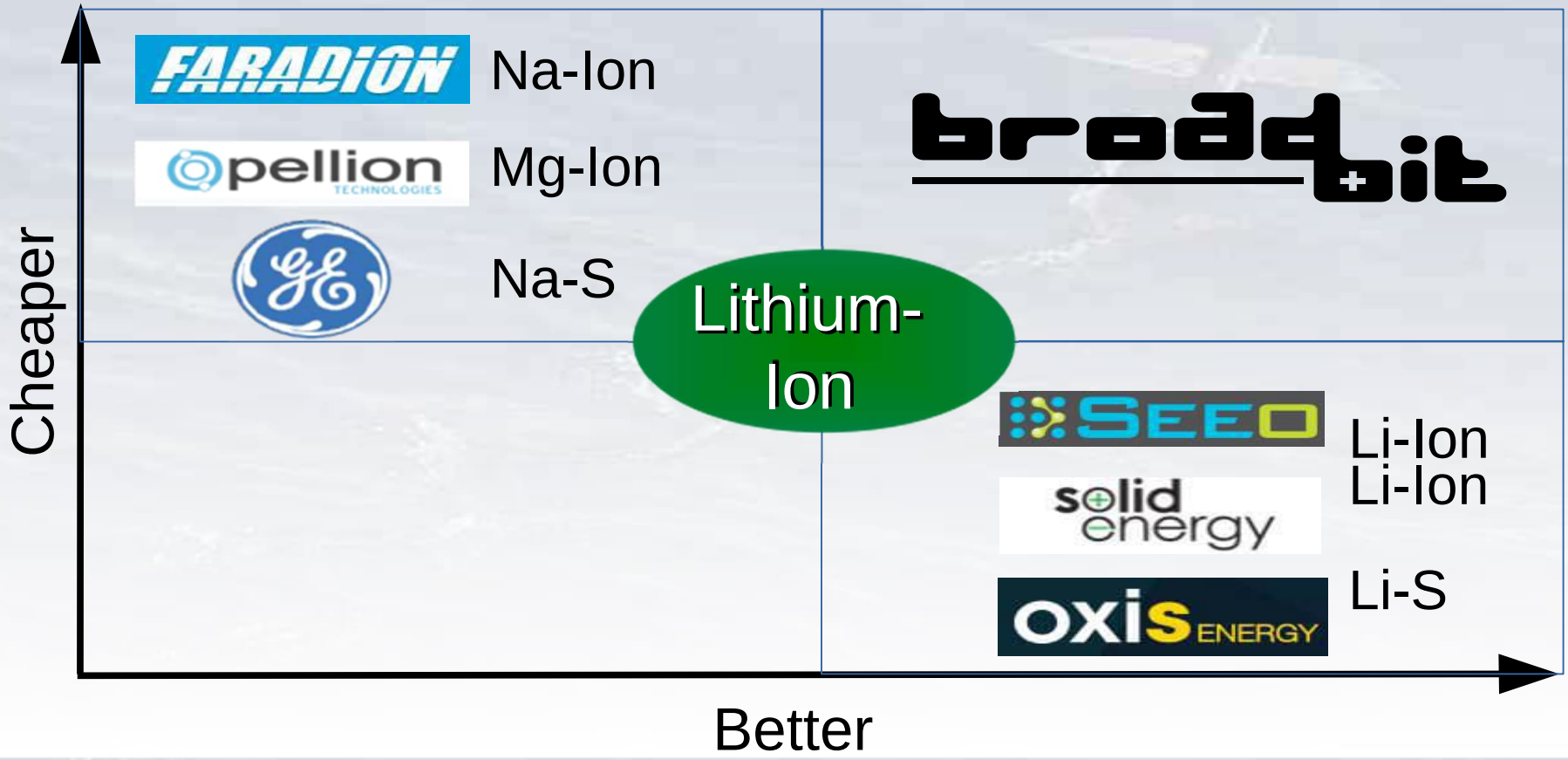
per kWh



Virtually unlimited scalability

Confidential and proprietary

BroadBit outclasses the competition



Confidential and proprietary

BroadBit opens new markets

Sufficiently high energy
enables electric airplanes



Sufficiently low-cost
enables grid storage



Sufficiently high power
replaces starter batteries



Confidential and proprietary

BroadBit's business is scalable

Stage 1

Electrolyte + Anodes & Cathodes



Components



Confidential and proprietary

BroadBit's business is scalable

Stage 1

Stage 2

Electrolyte + Anodes & Cathodes



Components



Cells



Confidential and proprietary

BroadBit's business is scalable

Stage 1

Stage 2

Stage 3

Electrolyte + Anodes & Cathodes



Components



Cells



Battery Packs



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BroadBit has an experienced team

David Brown, PhD (CEO):

StreamWise · CANATU · ParticleStream Technologies · TEICOS PHARMA · ALMAKOR



Andras Kovacs, MSc (CTO):

broadbit



Tapani Alasaarela, PhD (Chief Eng):

nanobakers*



David Lloyd, PhD (Chief Chem):

CYGNET Cloud

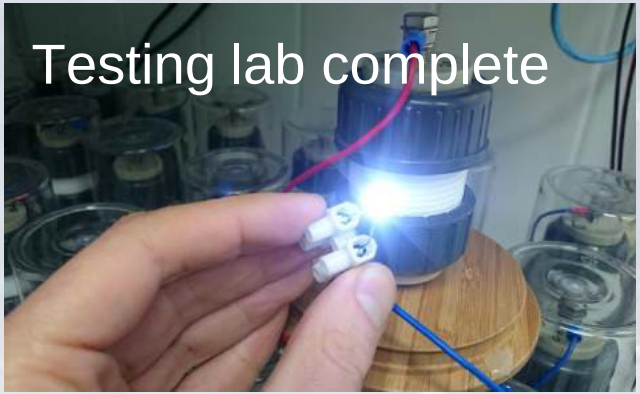


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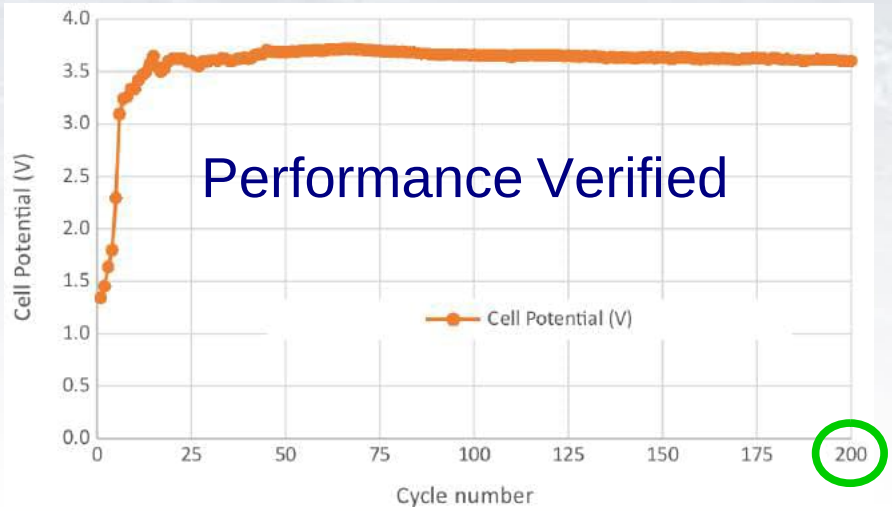
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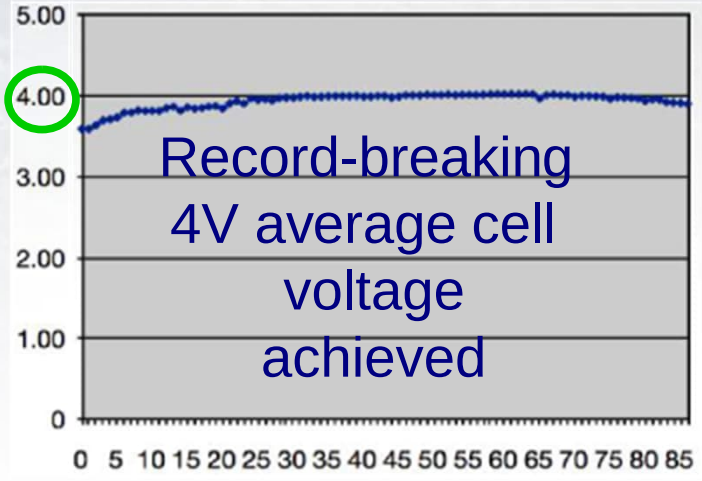
BroadBit is preparing for market













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BroadBit R&D assembly capabilities


Spiral in rolling machine



Spiral ready for anode tab weld

BroadBit: the only EU Co. able to make custom cylindrical cells


Spiral cell
“jelly roll” complete


Test cell
ready for filling


Filled & sealed
18650 cell

Confidential and proprietary

BroadBit is preparing for rapid growth

Investments to date:

400 k€ internal (not counting sweat)

500 k€ equity

900 k€ Government grants and loans

Funding goals:

1.2 M€ Q2 2018

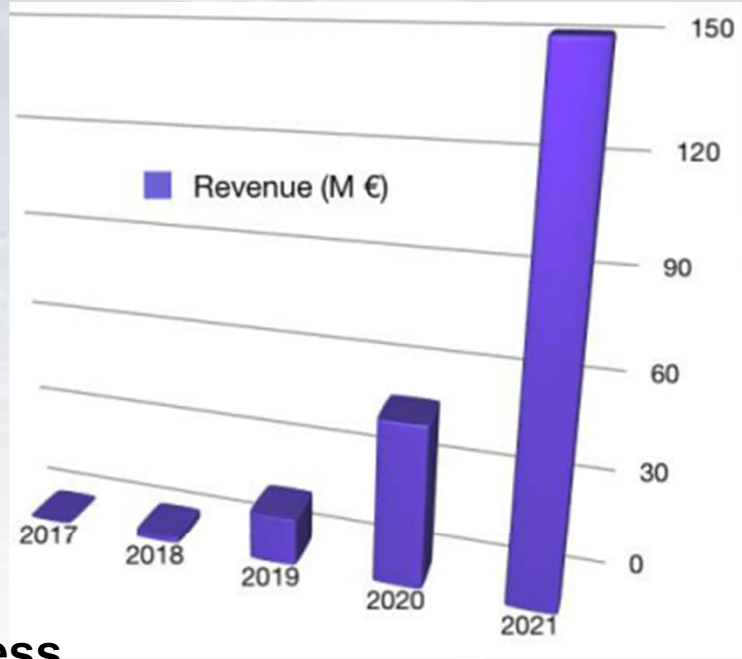
7.5 M€ Q2 2019

Use of investment:

Complete pilot facility & certify product and process

Purchase outsourced battery assembly

Revenue Forecast (k€):



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Changes in policy to support storage

Remove double electricity use taxation:

Now taxed both when charging and when consumed off site

Make tax based on electricity price:

Now tax is based on amount of electricity

Remove double electricity transmission tax:

Now taxed both when transmitted to and from storage site

Change regulation to favor electricity storage:

Now regulations encourage TSOs & DSOs to expand grid instead of store

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Energy Week TOP 30

broadbit

Never run out

SLUSH TOP 20

Winner RawMaterials Connecting matters

Contact: David Brown, PhD

david.brown@broadbit.com

Airbus BizLab Aerospace Accelerator

SINO TRACK TOP 10

KasvuOpen® WINNER 2017

PIONEERS '17

EVS Cleantech Award EUROPEAN VENTURE SUMMIT

kapsch >>> challenging limits

FACTORY Winner 2017

White Bull summits BULLY AWARD WINNER 2017

SEAL OF EXCELLENCE European Commission

Award CTS TECHTOUR International Venture Club CLEANTECH SUMMIT ROTTERDAM

INNOVATION RADAR Prize

InnoVest Cleantech Award

IDTechEx EVES Launchpad

Runar Backstrom Grant

WEBIT FESTIVAL EUROPE ENTERPRISE | POLICY | STARTUPS Green Award

MILstartup Award