



CELTIC-NEXT Proposers Day



7th of September 2022, Online via WebEx

Project Proposal

Event-Triggered Data

TEGNOLOGY

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Teaser

Event triggered data - adding intelligence to data generation and transmission

Benefits:

- *Increased ratio between executed information/amount of data*
- *Reduced energy consumption in data generation and transmission*
 - *More elegant system design and system integration*

What makes the added value?

Why should I participate in the project?

Organisation Profile

RETHINK POWER SUPPLY FOR FUTURE IOT



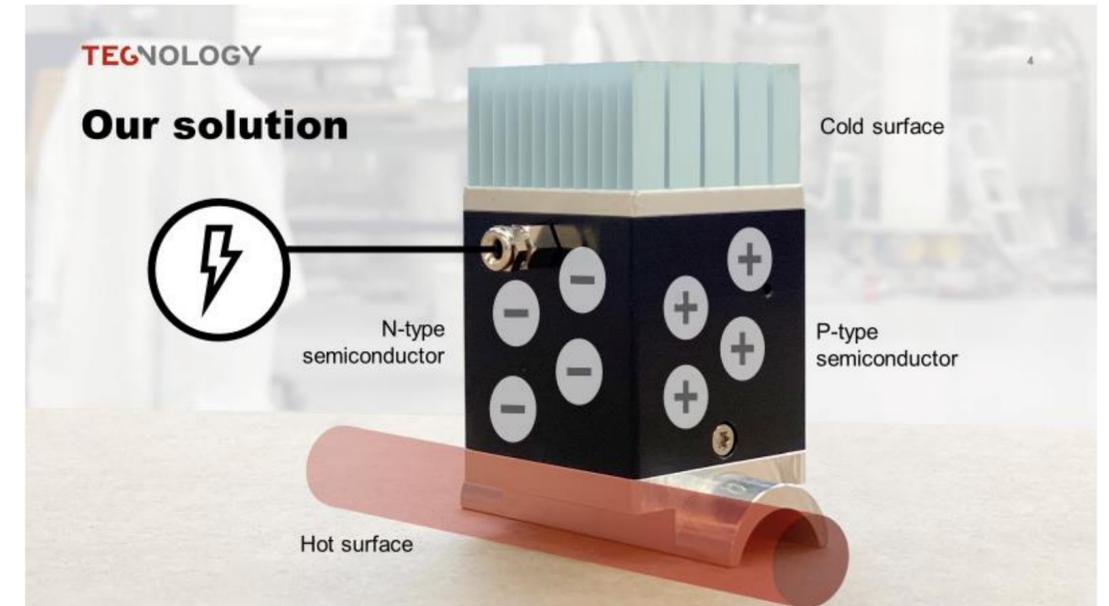
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The big (small) problem



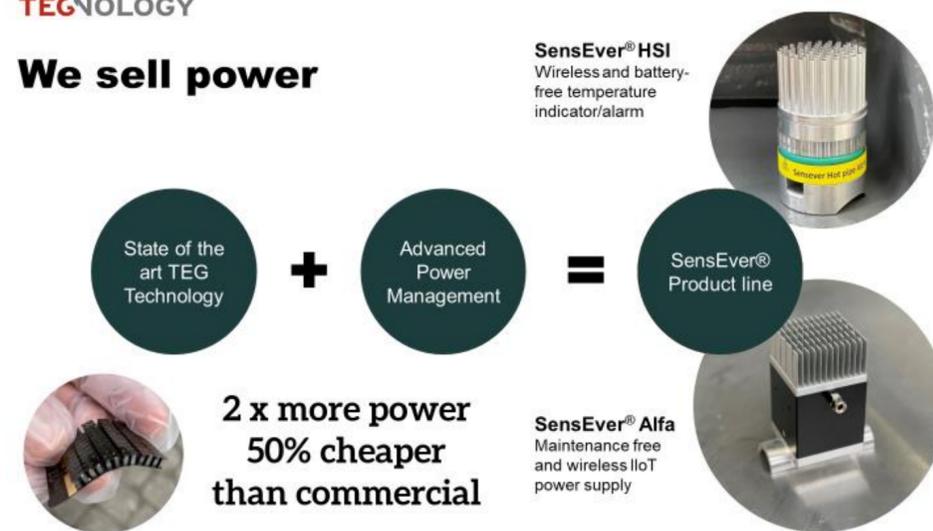
25 Billion
IoT devices online by 2025

78 Million
Batteries to be charged every day



TEGNOLOGY

We sell power



TEGNOLOGY

Who we are

- | | | | | | |
|--|--|--|---|--|--|
|
Hao Yin
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COO
M.Sc. from CBS |
Jörg Rehder
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Development Engineer
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Jesper Meulengracht
Business Development
Exec & DTU Mentor |
Lars-Ulrik Aaen Andersen
Department director
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Proposal

Introduction



Challenges and objectives

Big data \neq more data \neq redundant data \neq more intention from human

Data has a cost: Transmission + Handling + Storage + ...

- Intelligent data screening and filtering by edge computing (event-triggered)
- Energy harvesting for battery extension and replacement
- Smart data storage and transmission

Proposal

Introduction



Technical goals

- More power will be generated during entire lifetime by Energy harvesting.
- Pre-screening of data using AI and machine learning algorithm.
- On-site data treatment and storage, before transmission.
- Edge computing, thermal dynamic design, system integration.

Key benefits / the societal, economic and sustainable

- Less redundant data
- Easy data handling and storage
- Less radio traffic
- Less batteries
- Less intention from humen
- Less electronic wastes



Partners



Partners involved

- Denmark: TEGnology ApS (SME) and Technological Institute
- Sweden: Celsicom (SME)
- Spain : UC3M (Univ.) + 1-2 industrial partners
- Portugal: UTAD (Univ.) + 1-2 industrial partners
- UK: ENVERSE (SME)
- *Place for more contributors...*



Contact Info



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Presentation available via:



12th September 10 CET

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