

# Smart Energy New Business Models

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# Change is driving us:

Electricity markets are changing:

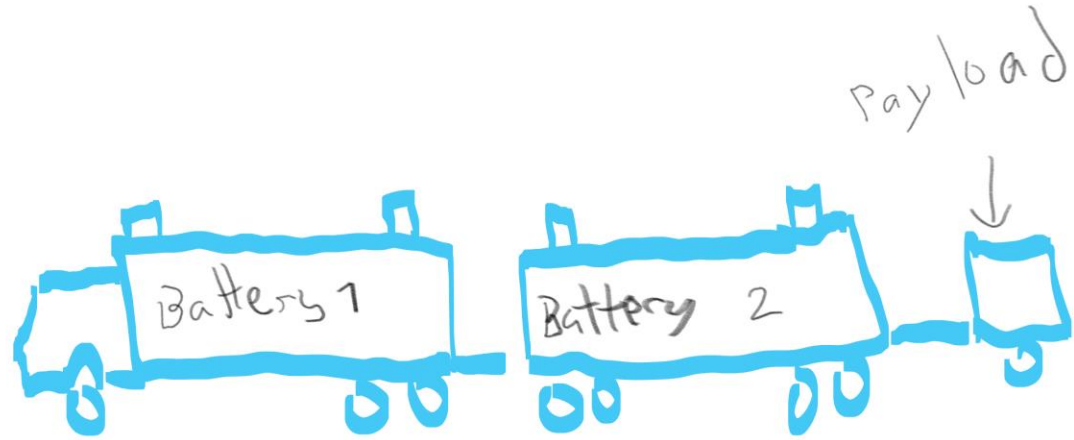
- From abundance to shortage of resources
- From fossil to renewable
- From centralised to local

**In the future we may not be able to use  
electricity as we want**



I'm self sufficient with energy  
KEEP OUT!

**Our consumption profile may depend on the current production of renewable resources and local storages**



↳ truck, future transport

**In order to avoid the nasty future scenarios  
we need to find new ways to deal with grids  
and electricity**

# What are the new assets?

- **”every device consuming electricity should have ability for flexibility as a built in function”**
- The assets are everywhere in the built infrastructure
- These unit size is tiny
- We should find ways to get these assets to active use
- There we need to have new business models



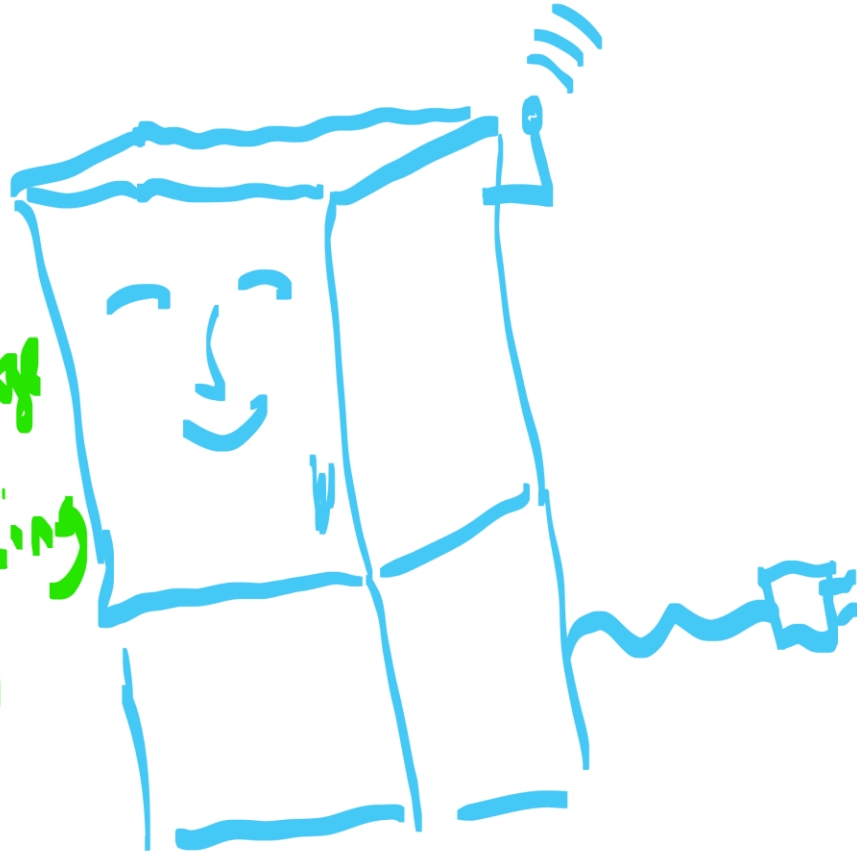
# How to get these assets to use?

- **A change is necessary in the electricity market:**
  - Current structure is built for big asset providers
  - Local management and control is totally out of the scope
  - Participation to market is expensive and profit margins are narrow

# A new marketplace for harvesting small distributed resources is needed

- When selling and buying few kilowatts the cost for a single transaction can only be few cents
  
- Thus
  - Bidding, bookkeeping, contracts, micro payments and all necessary actions should be totally automated
  - All this must be offered as a full service for all customers (ie. property owners)
  - The revenue must go to the owner of the resources, not to the aggregators or other intermediators
  - There will be no human interaction just machines, devices and algorithms

I am  
Smart Fridge  
I am balancing  
your Grid



# FLEXIMAR: a novel concept for a change

- Ongoing research project
- Will provide online marketplace and business models for small prosumers
- Is presented in the poster sessions today

**Thank You, Any Questions?**