



elmű·émász


Changing customer behavior from a modern energy company perspective


ELMŰ-ÉMÁSZ · Tamás Jászay · 20th October 2017


Introduction

Unique asset mix and diversified European footprint





Leading positions across countries in Europe with unique asset profile

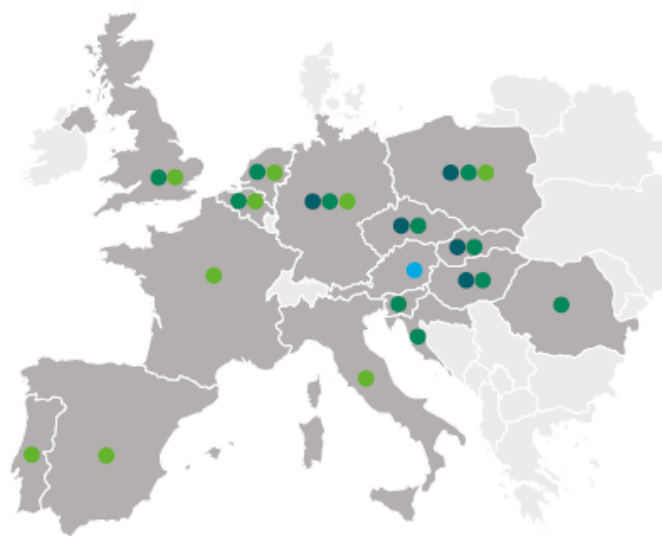
 **3.7 GW**
renewable capacity¹

 **574,000 km**
grid length²

 **5x #1**
positions³

Market presence

-  Renewables
-  Grid & Infrastructure
-  Retail
-  Strategic partnership



Focus on Europe –
anchored in Germany

Limited exposure
to commodity
prices

Largely CO₂-free
&
no nuclear

Enabler of energy transition

Introduction

innogy's strategy in line with energy transition targets



Sustainable generation
of electricity

Renewables



Wind assets



Solar assets

EPC/O&M
IPP



Efficient distribution of energy

Grid & Infrastructure



Grid assets



Grid+



FTTx



Products and services that meet
needs

Retail



Commodity



Energy+



e-mobility

Core business

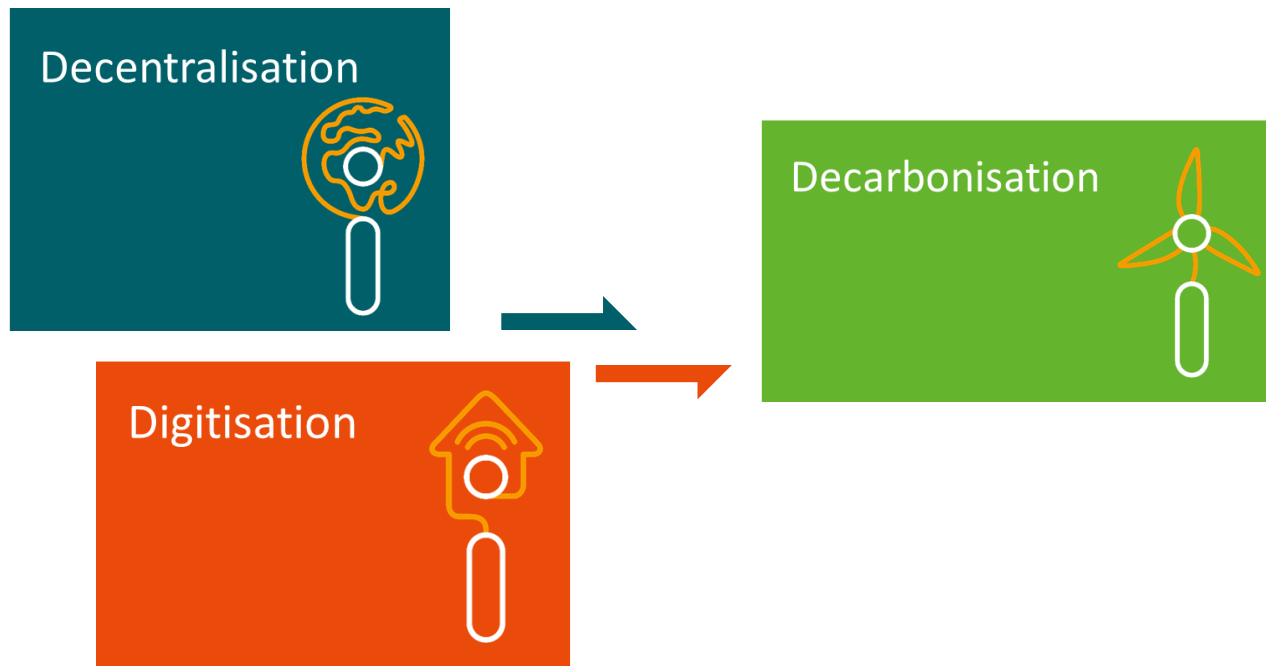
New growth areas



Innovation
Hub

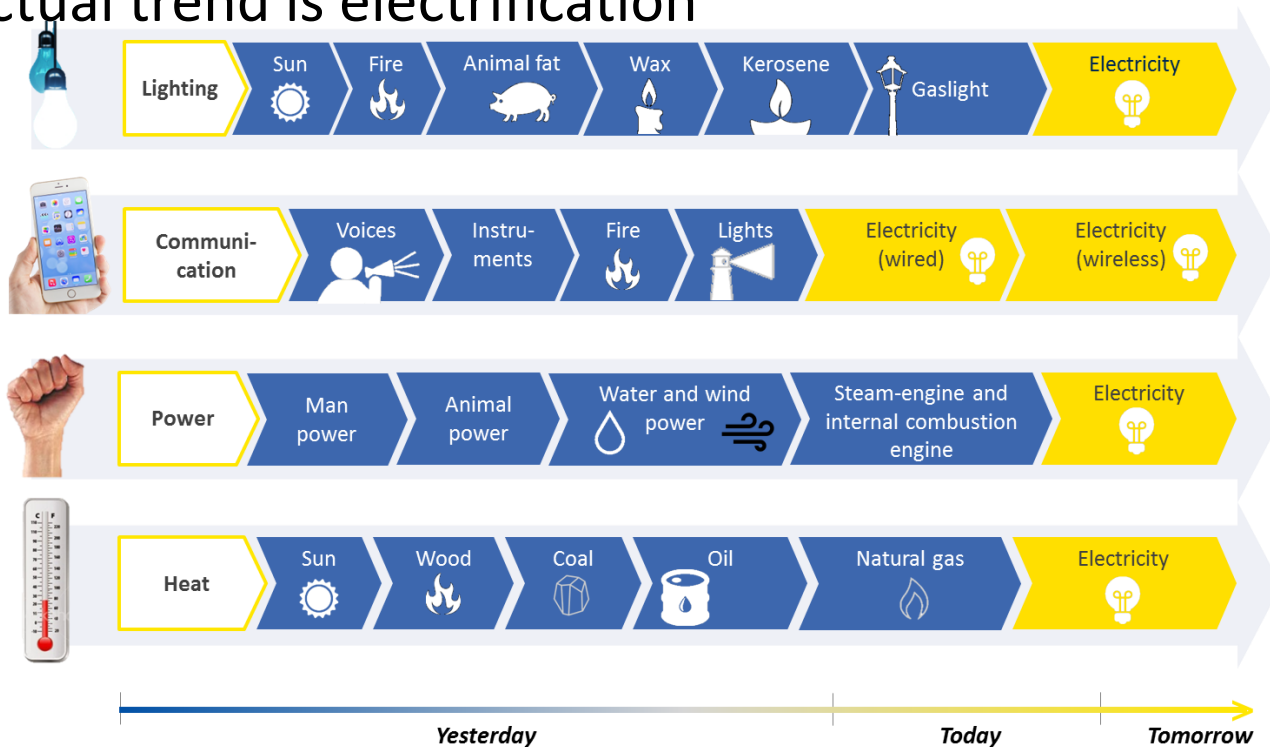
The New Energy World

We understand the megatrends which are challenging the energy industry and we provide solutions

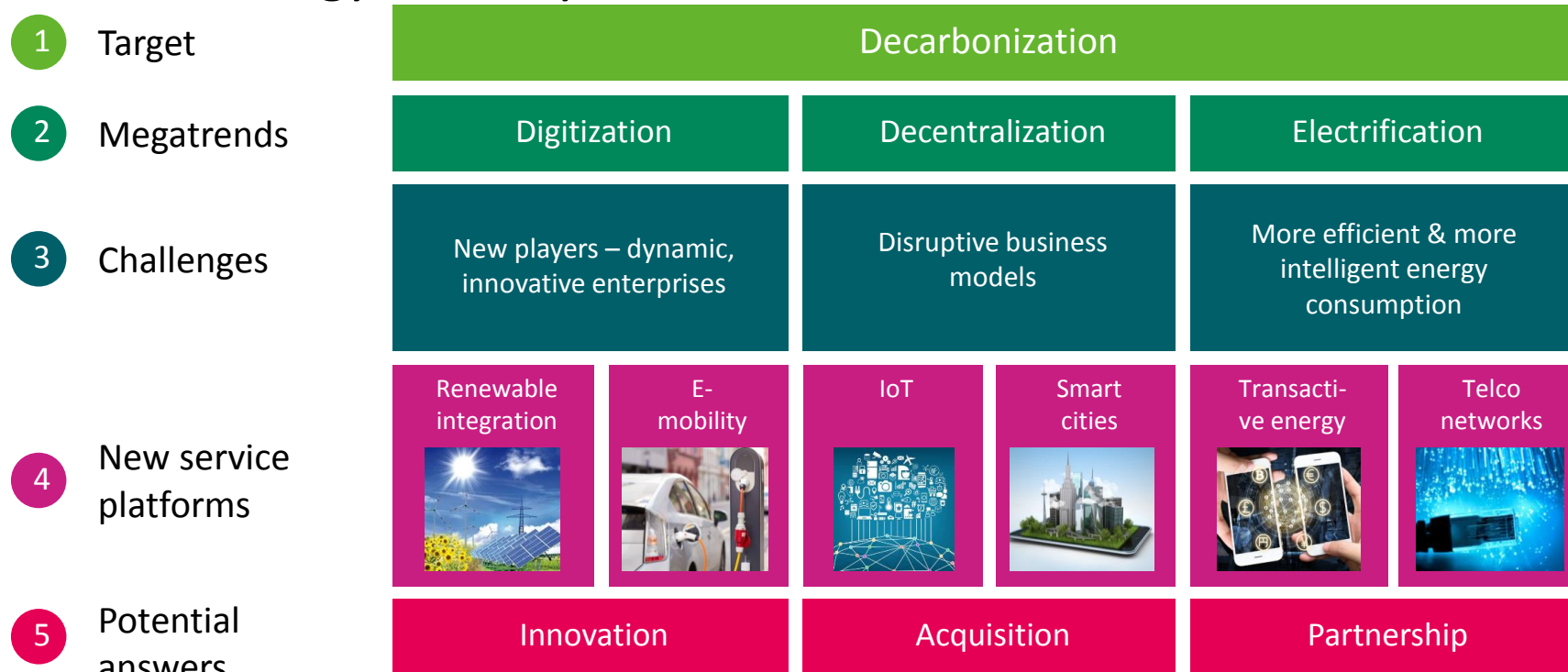


The New Energy World

Game changers in the energy sector to meet basic needs – the actual trend is electrification



New players, new platforms, new business models emerge in the energy industry



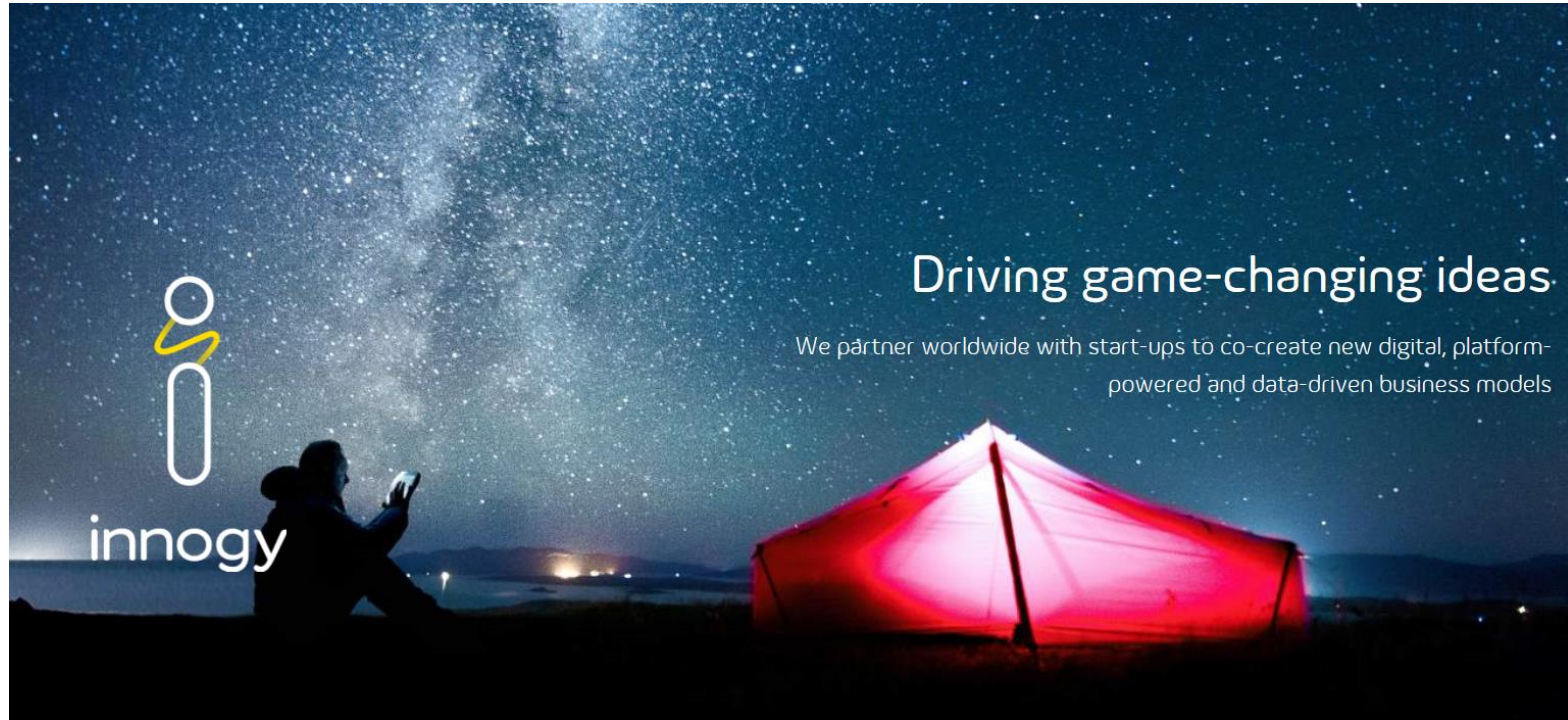
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Partnerships overcome lonely wolves

PARTNERSHIP



innogy Innovation Hub: driving the change through innovation & partnerships



Driving game-changing ideas

We partner worldwide with start-ups to co-create new digital, platform-powered and data-driven business models

The New Energy World

Empowerment via Conjoule, a P2P energy market



You choose, which consumer you want to supply with your energy.



You offer local companies and public institutions an environmental friendly energy source.



You can analyse the performance of your photovoltaic system on a regular basis.



You support the development of local structures and contribute to grid efficiency.



2 pilots in
Essen &
Mülheim

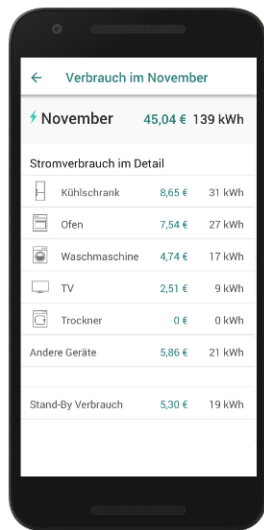
Conjoule has a clear vision to create tomorrow's energy system: it's decentralised, digitised and customer friendly. It follows the idea of the 'sharing economy' where consumers can buy energy directly from their neighbourhood via Conjoule's platform.

/Thomas Birr/

The New Energy World

Fresh Energy: the first digital energy provider to drive energy consciousness

Identify energy-guzzlers



Pay for only what you use

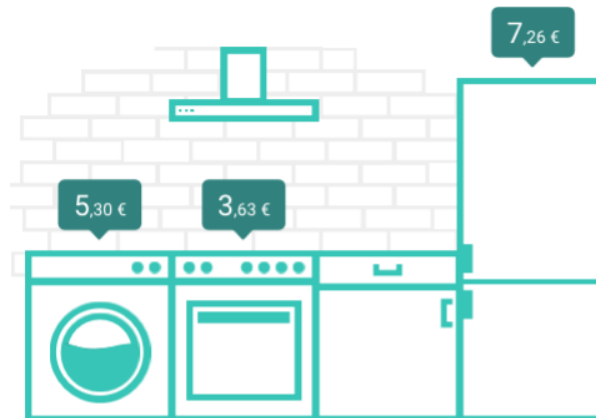


Free smart meter



„Fresh Energy gives you the transparency, the knowledge and the possibilities: Now the power is in your hands.“

Monthly consumption



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What does energy mean to our customers?

*„People don't want raw kilowatt-hours or lumps of coal or barrels of sticky black goo. **They want hot showers, cold beer, comfort, mobility, illumination.**”*

/Amory Lovins/



Even more true, as we enter the new, service-bundled energy world...

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B2C customer of the future...

uses home battery
system

is energy conscious

drives an electric
vehicle



generates electricity via
PV and sells the surplus

contacts the supplier on
digital channels

uses smart,
connected
devices and
automated
processes

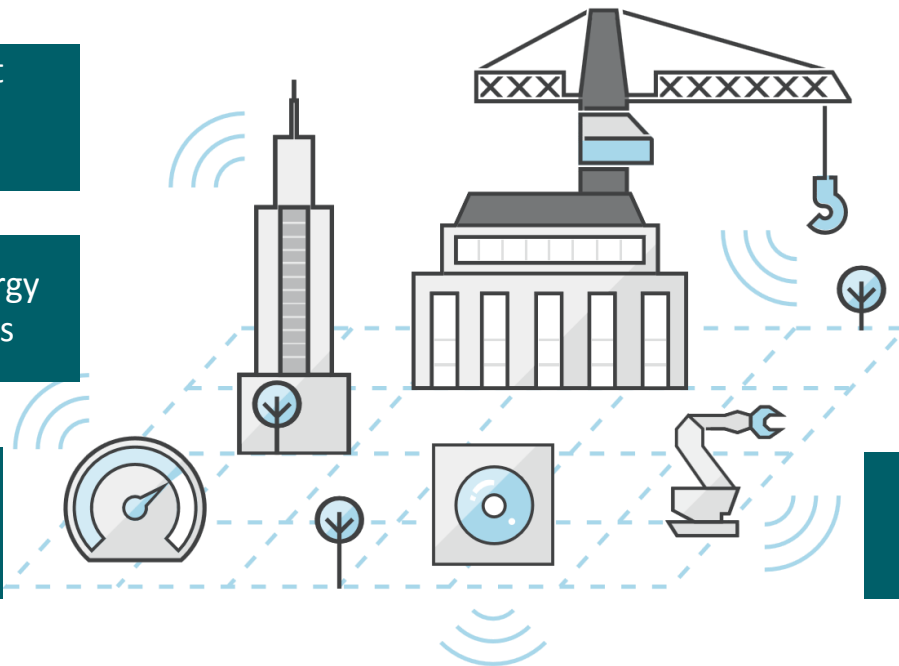
The New Energy World

B2B customer of the future...

monitors equipment
performance with
intelligent sensors

operates complex energy
management systems

takes care of energy
procurement tasks



prefers on-site
renewable generation

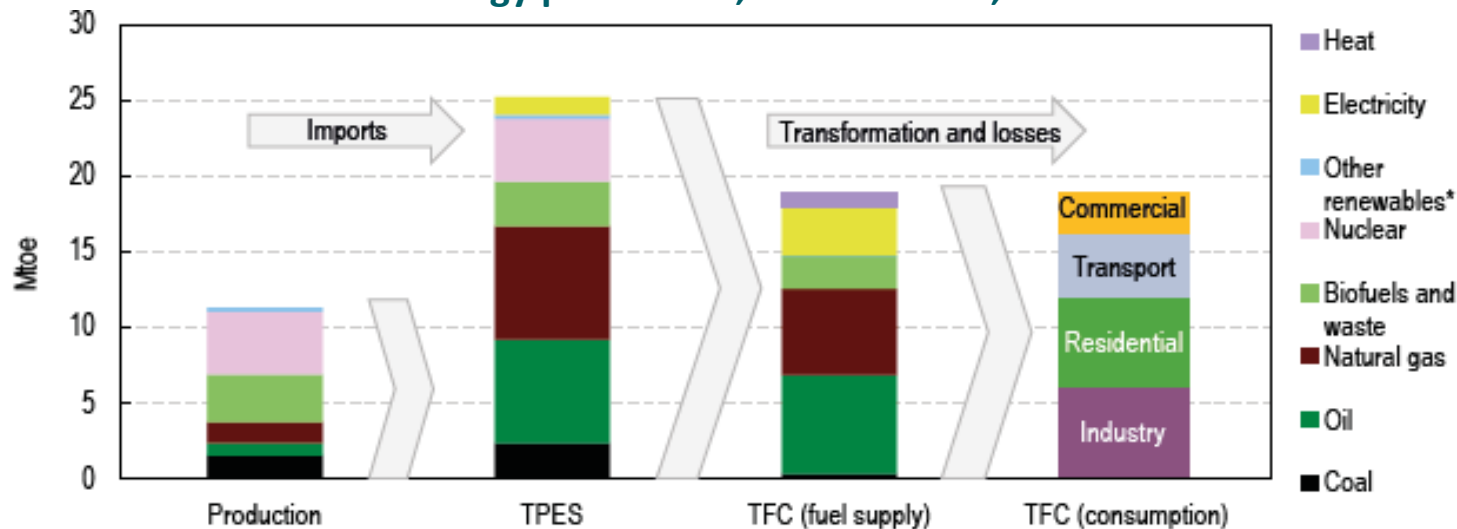
uses demand side
management tools

connects sites, aggregates
loads and provides VPP
services

Hungarian market

Key data of the Hungarian market – exposure to energy import

Overview of energy production, TPES and TFC, 2015



* Other renewables constitutes small shares of wind, hydro, solar and geothermal.

- TPES per capita below European average
- TPES per GDP above European average

Facts&figures



- Strong state interventions, far-reaching regulation of energy markets, artificially decreased household energy prices, expansion of nuclear energy



- Regulated household gas and electricity prices among the lowest in the EU
- Free industrial gas and electricity market, prices in the mid to late zone in EU comparison



- High VAT (27%), Robin-Hood tax (31% over 19% of corporate tax, i.e. a total of 50%), cable tax (125 HUF/m), product tax for solar energy. EU infringement process to acknowledge sectoral taxes



- CO₂ goals have already been met, a very modest support of renewables, subsidies to achieve energy efficiency using EU funds
- Share of RES: 14,5%* in gross final energy consumption, 10,5%** in gross electricity generation (2015)

Hungarian market

Pioneering activity of ELMŰ-ÉMÁSZ in Hungary

