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 capacity
- **574,000 km**
  - grid length
- **5x #1 positions**

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
- Efficient distribution of energy
- Products and services that meet needs

Renewables
- Wind assets
- Solar assets

Grid & Infrastructure
- Grid assets
- Grid+ FTTx

Retail
- Commodity
- Energy+ e-mobility

Core business
New growth areas
The New Energy World

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

1. Target

2. Megatrends
   - Digitization
   - Decentralization
   - Electrification

3. Challenges
   - New players – dynamic, innovative enterprises
   - Disruptive business models
   - More efficient & more intelligent energy consumption

4. New service platforms
   - Renewable integration
   - E-mobility
   - IoT
   - Smart cities
   - Transactive energy
   - Telco networks

5. Potential answers
   - Innovation
   - Acquisition
   - Partnership
Part of innogy

The New Energy World
Partnerships overcome lonely wolves
innogy Innovation Hub: driving the change through innovation & partnerships
The New Energy World

Empowerment via Conjoule, a P2P energy market

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/
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."
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...
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
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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

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

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

Source: IEA (2017a), World Energy Balances.
Hungarian market

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)

*EUROSTAT  **MEKH
Hungarian market

Pioneering activity of ELMŰ-ÉMÁSZ in Hungary

TELCO NETWORKS

PV BUSINESS

E-MOBILITY

SMART POLES