Smart Appliances in Europe

Sanne Goossens

Smart Living & Competitiveness Policy Manager

Moscow, 18 May 2018

APPLiA
Home Appliance Europe

APPLiA - Home Appliance Europe represents home appliance manufacturers from across Europe.

By promoting innovative, sustainable policies and solutions for EU homes, APPLiA has helped build the sector into an economic powerhouse, with an annual turnover of EUR 47.6 billion, investing over EUR 1.4 billion in R&D activities and creating nearly 1 million jobs.

Large Home Appliances

Small Home Appliances

Home Comfort Appliances

Direct Members

25

National Associations
in 24 countries

NEL

EHL

APPLiA Danmark

AMDEA/BEAMA

VLEHAN

APPLiA Polska

AGORIA/FEE

APPLiA CZ

APPLiA Slovakia

ZVEI

FEA

FEEI

APPLiA Hungary

GIFAM

APPLiA Romania

AGEFE

APPLiA Italia/
Assoclima

APPLiA Bulgaria

TurkBESD

ANFEL/FAPE

SVEIS

Smart Appliances – by the numbers

Appeal of Smart Home products

Consumers
Leading edge consumers

Security & control
Smart energy & lighting
Smart entertainment & connectivity
Smart health
Smart appliances

Appeal of Smart Home concept, in 2016.

7% Not at all appealing
15% Extremely appealing
16% Not very appealing
25% Very appealing
38% Fairly appealing
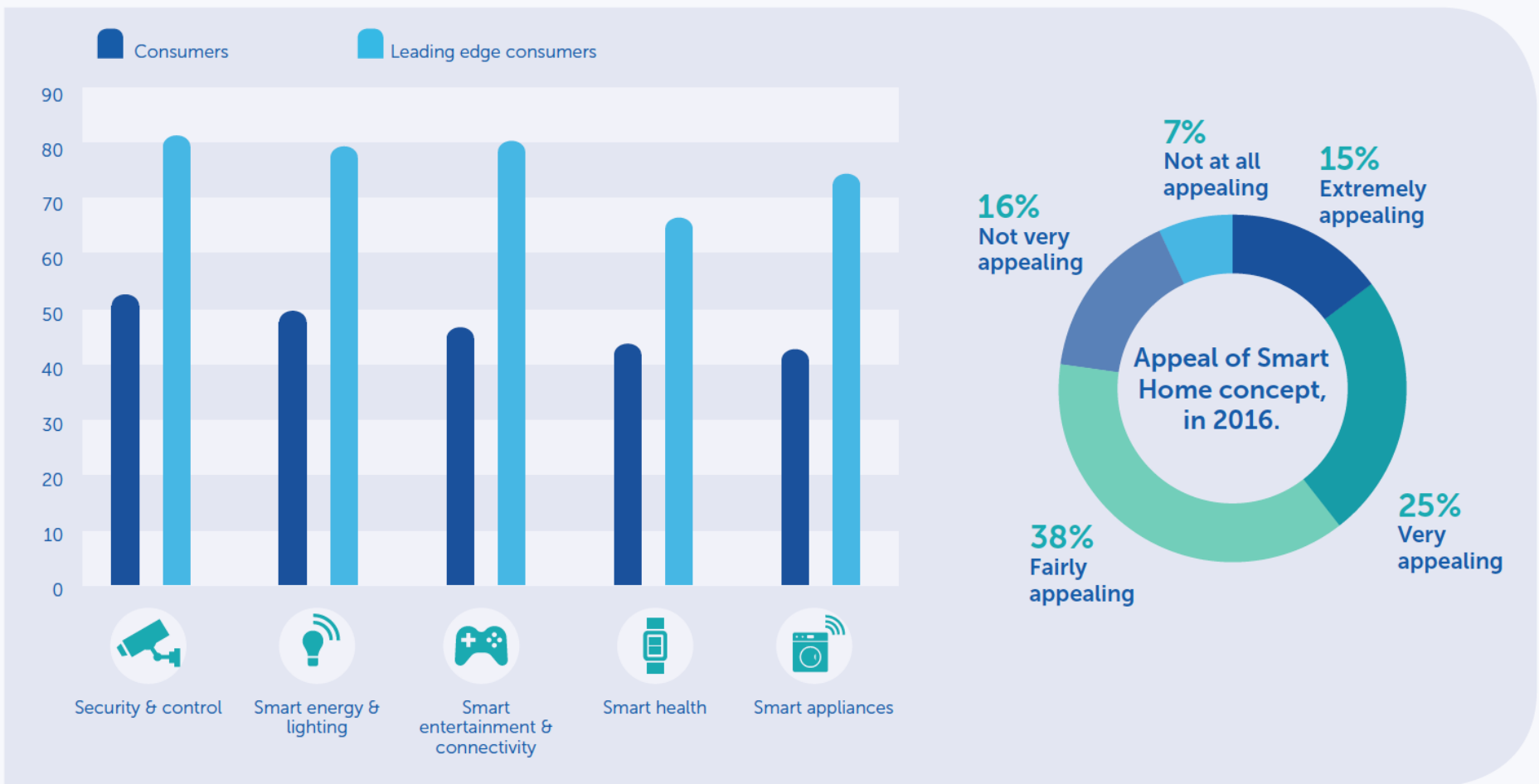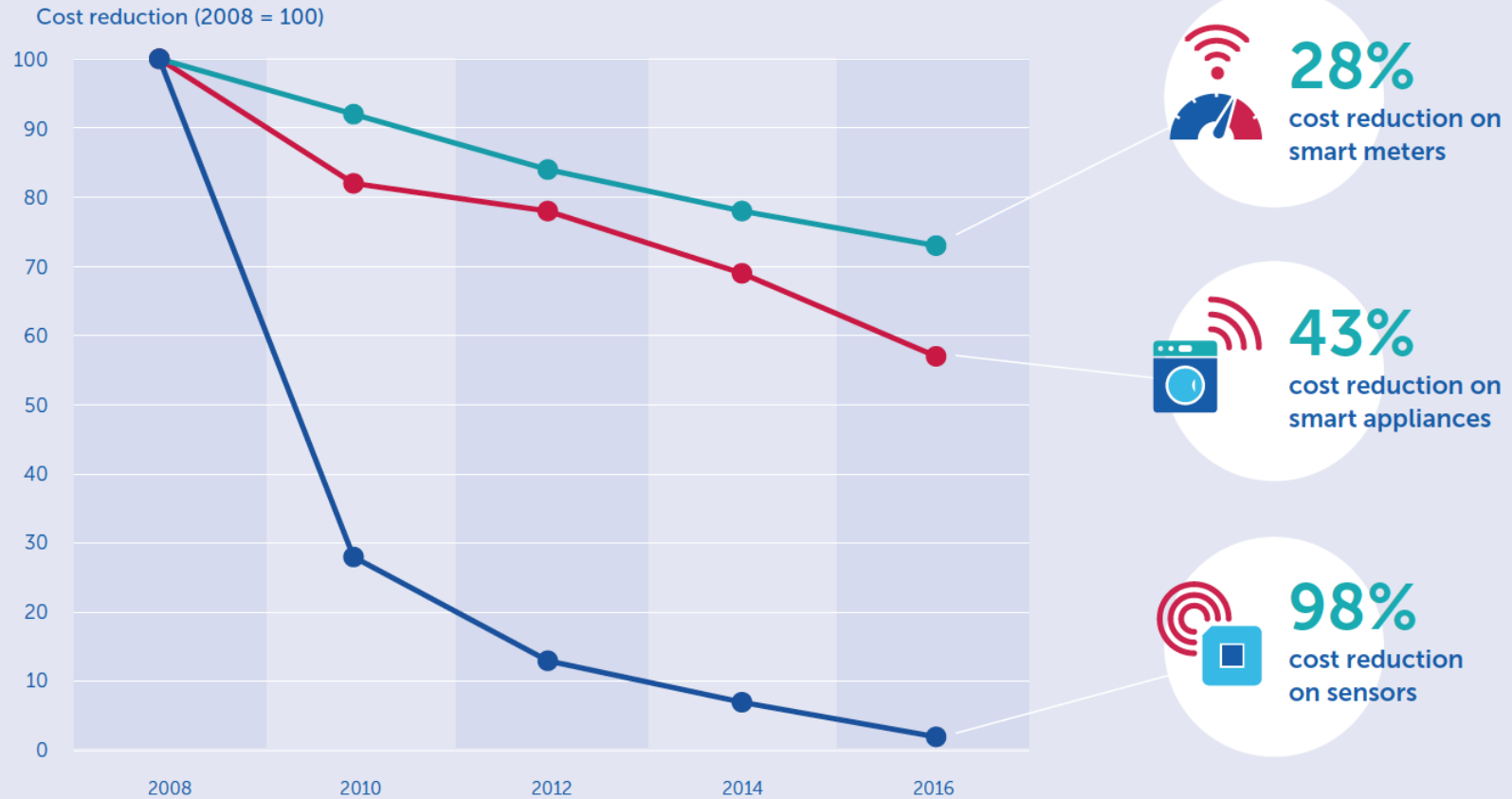
Appeal of Smart Home products categories, in 2015, in 7 markets (Brazil, China, Germany, Japan, South Korea, UK and USA). Leading edge consumers indicate market evolution.
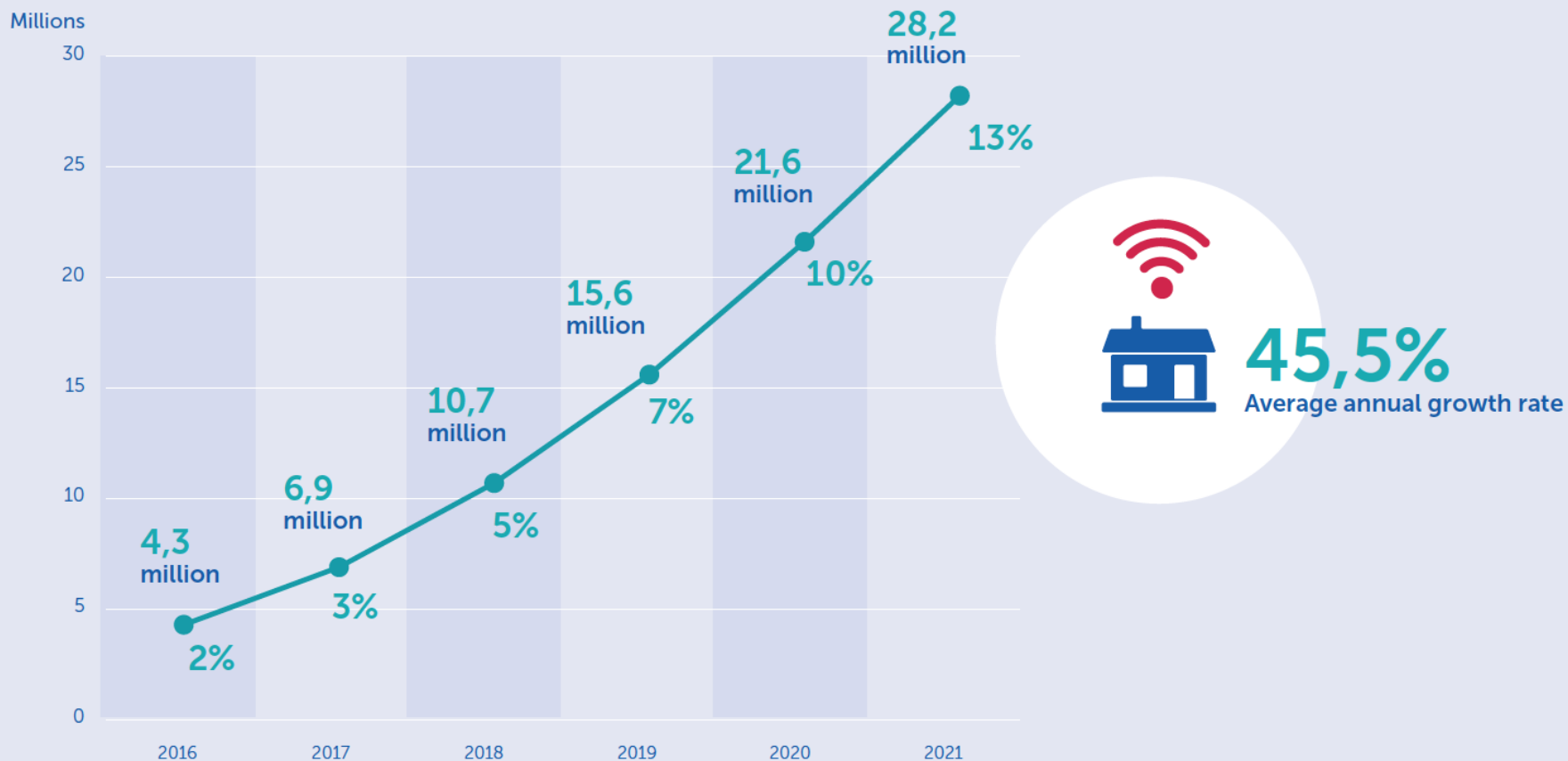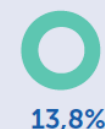
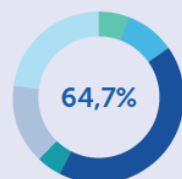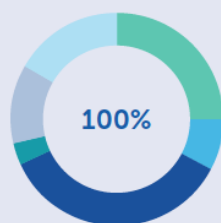*Source: GfK*

APPLiA

Unit cost of a smart devices

Number of smart devices @home

>**500** devices

8,6 devices

2,4 devices

2008   2015   2022

Number of Smart Homes, in Europe

Millions

- 28,2 million — 13%
- 21,6 million — 10%
- 15,6 million — 7%
- 10,7 million — 5%
- 6,9 million — 3%
- 4,3 million — 2%

2016 2017 2018 2019 2020 2021

45,5%
Average annual growth rate

APPLiA

Energy consumption in EU households

	Total Residential/ Households	Space heating	Space cooling	Water heating	Cooking	Lighting & appliances	Other end uses
Electricity	25,1	3,9	0,5	2,8	2,8	13,8	1,4
Derived heat	7,8	6,0	0,0	1,8	0,0	0,0	0,0
Gas	35,3	27,4	0,0	6,1	1,8	0,0	0,0
Solid Fuels	3,4	3,1	0,0	0,3	0,0	0,0	0,0
Petroleum products	12,0	9,8	0,0	1,5	0,7	0,0	0,0
Renewables	16,4	14,6	0,0	1,4	0,3	0,0	0,1
Total	**100,0**	**64,7**	**0,5**	**13,9**	**5,7**	**13,8**	**1,5**

APPLiA
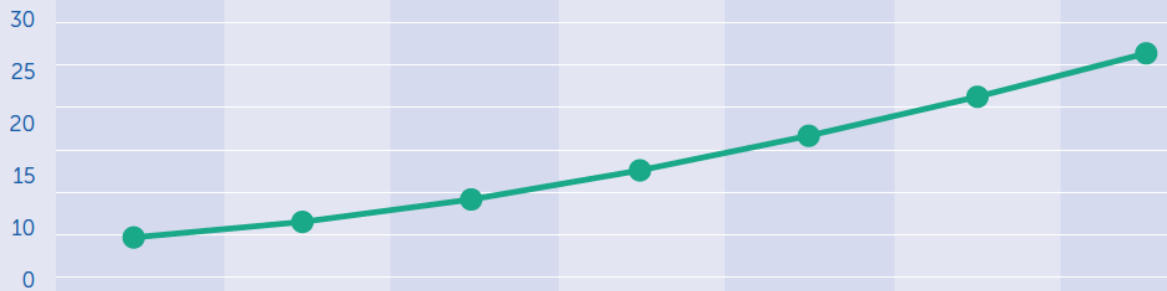
Revenue from Energy Management in a Smart Home

Revenue of smart appliances in Europe, in million Euro
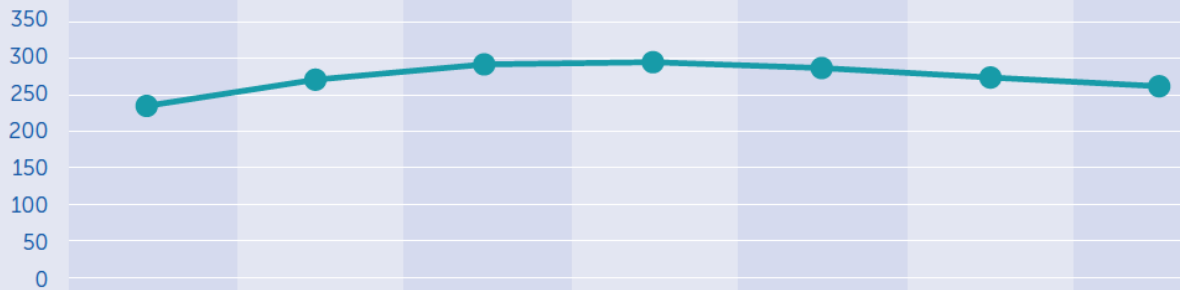
35,72% Average annual growth rate

Users of smart appliances in Europe, in millions

33,29% Average annual growth rate

Average revenue per user, in Europe, in million Euro

1,82% Average annual growth rate

APPLiA

EU Regulatory Framework

- **Definition of Smart Appliance**
- **Market Design**
- **Ecodesign for Smart Appliances**
- **Interoperability**
- **Data economy**

Definition of Smart Appliances

- **Always related to Demand Side Management:**

Capable of automatically changing and optimising consumption patterns in response to external stimuli, with the aim to improve the environmental impact of energy use over the whole energy system

10 priorities

01		A new boost for jobs, growth and investment.
02		A connected digital single market.
03		A resilient Energy Union with a forward-looking climate change policy.
04		A deeper and fairer internal market with a strengthened industrial base.
05		A deeper and fairer Economic and Monetary Union (EMU).
06		A reasonable and balanced free trade agreement with the United States.
07		An area of Justice and Fundamental Rights based on mutual trust.
08		Towards a new policy on migration.
09		Europe as a stronger global actor.
10		A Union of democratic change.

Sources: European Parliament, European Commission

Market Design

- Electricity Market Regulation + Electricity Market Directive

- To update the European electricity market, for increased electrification + renewables

- Includes clear and consistent provisions to empower consumers to participate in residential demand side management ➔ open for any actor

- Flexible demand must be granted the same rights as energy production ➔ remove barriers to the roll-out of initiatives to exploit residential DSF

- Financial compensation at the real market value of the service provided

- Ownership and privacy of consumer data

Ecodesign for Smart Appliances

- Since 2014: preparatory study on Ecodesign for Smart Appliances

- New term: Energy Smart

- For appliances covered by existing Energy Labelling Regulation: Energy smart icon on the energy label if the product complies with the criteria for energy smart functionality

- For appliances covered by existing Ecodesign Regulation: Energy Smart icon attached if the product complies with the criteria of energy smart functionality

- Preliminary conclusions: more work is needed, before any measures

Interoperability
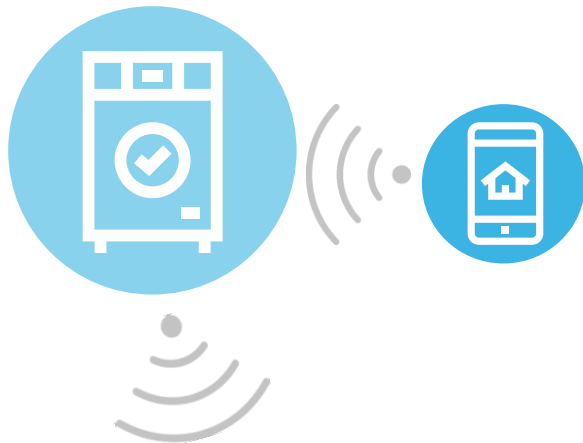
Interoperability = the capability of the appliance to interact with third parties to enable Demand Side Flexibility Use Cases
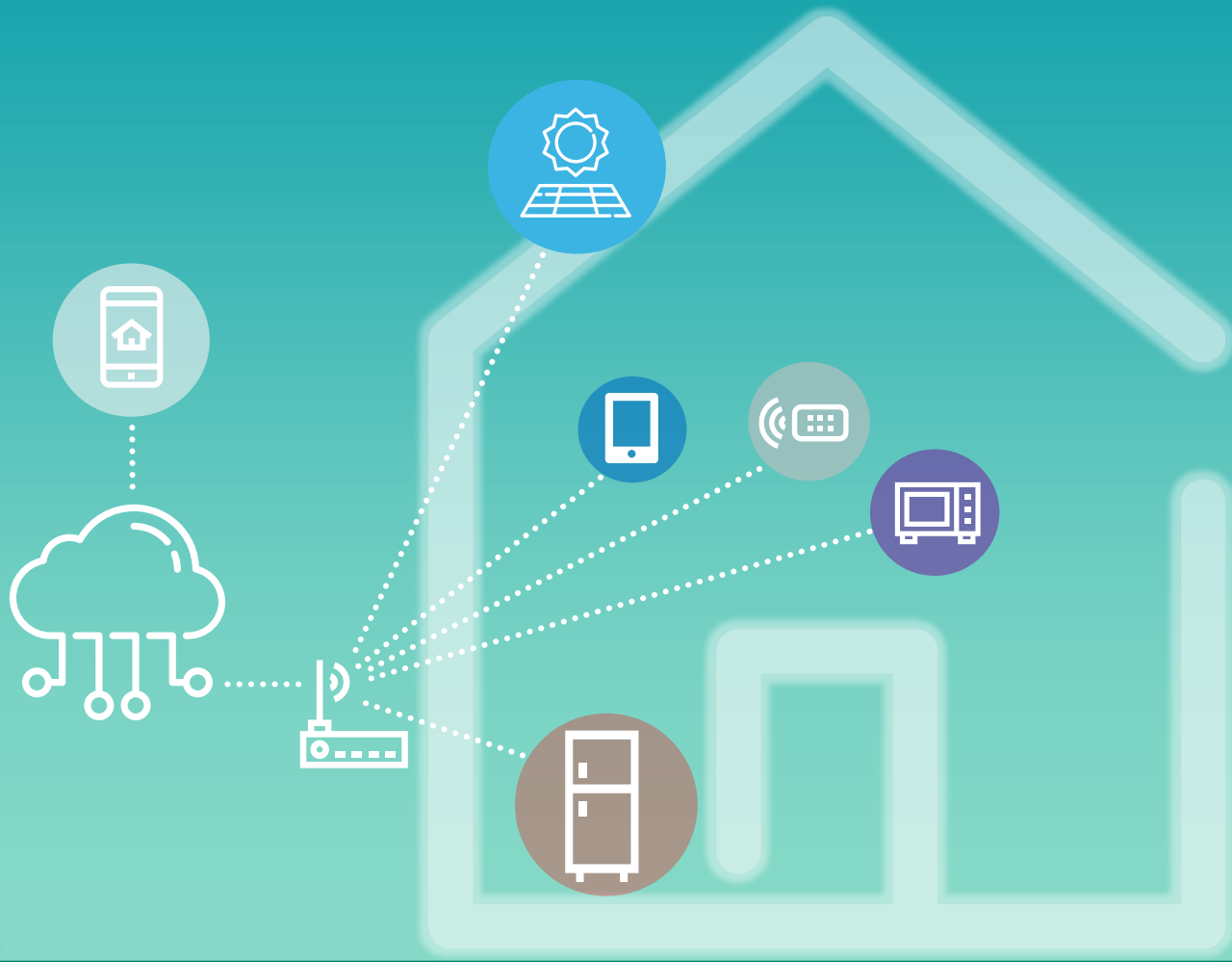
This definition is agreed within APPLiA and shared with all external stakeholders

Interoperability = **not** about giving others full control of the product!

CONSUMERS EXPECT SMART APPLIANCES TO BE PART OF A HOME ECOSYSTEM, AND TO HELP SAVE RESOURCES

" I want to control my different devices with a simple and central application, preferably also on the move''

How?

- Manage home consumption with the least effort from the consumers' side

- Reward and engage consumers to have an active role in the energy market

- Smart meters, smart appliances, EV, HVAC able to be coordinated by a single entity: the energy manager

EEBUS | SPEAK ENERGY

Energy@home

Data Economy

- General Data Protection Regulation (GDPR) ➜ 25 May 2018
- E-Privacy Regulation ➜ draft
- Cybersecurity Act ➜ draft

Thank You

sanne.goossens@applia-europe.eu

APPLiA
Home Appliance Europe

www.applia-europe.eu