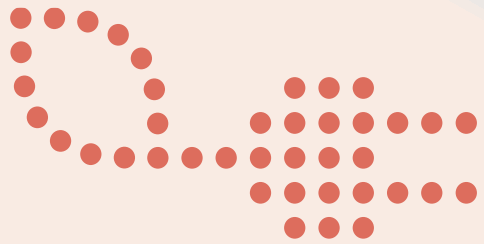


# SMART HEATING SOLUTIONS FOR ELECTRIFIED HEAT SUPPLY



ælectra  
THE ECO HEATING APPLICATION ®

D.En.S. Deutsche Energiesysteme GmbH

[www.aelectra.de](http://www.aelectra.de)



# MISSION

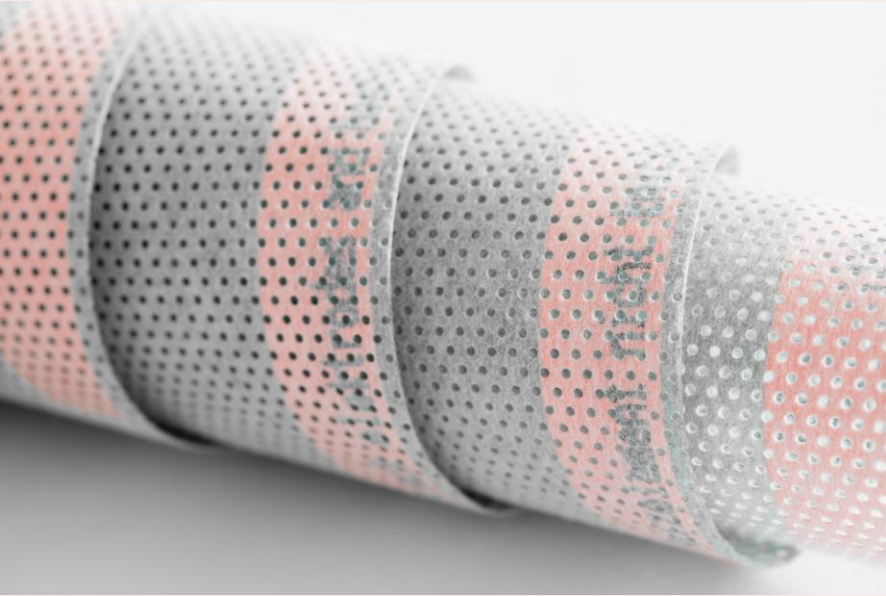
Integration of the heating & renewable electricity  
sectors

Decarbonisation of heat generation

Technical added value for the energy transition

Economic benefits for the real estate market

# SYSTEM COMPONENTS



Carbon + PET Membrane

+



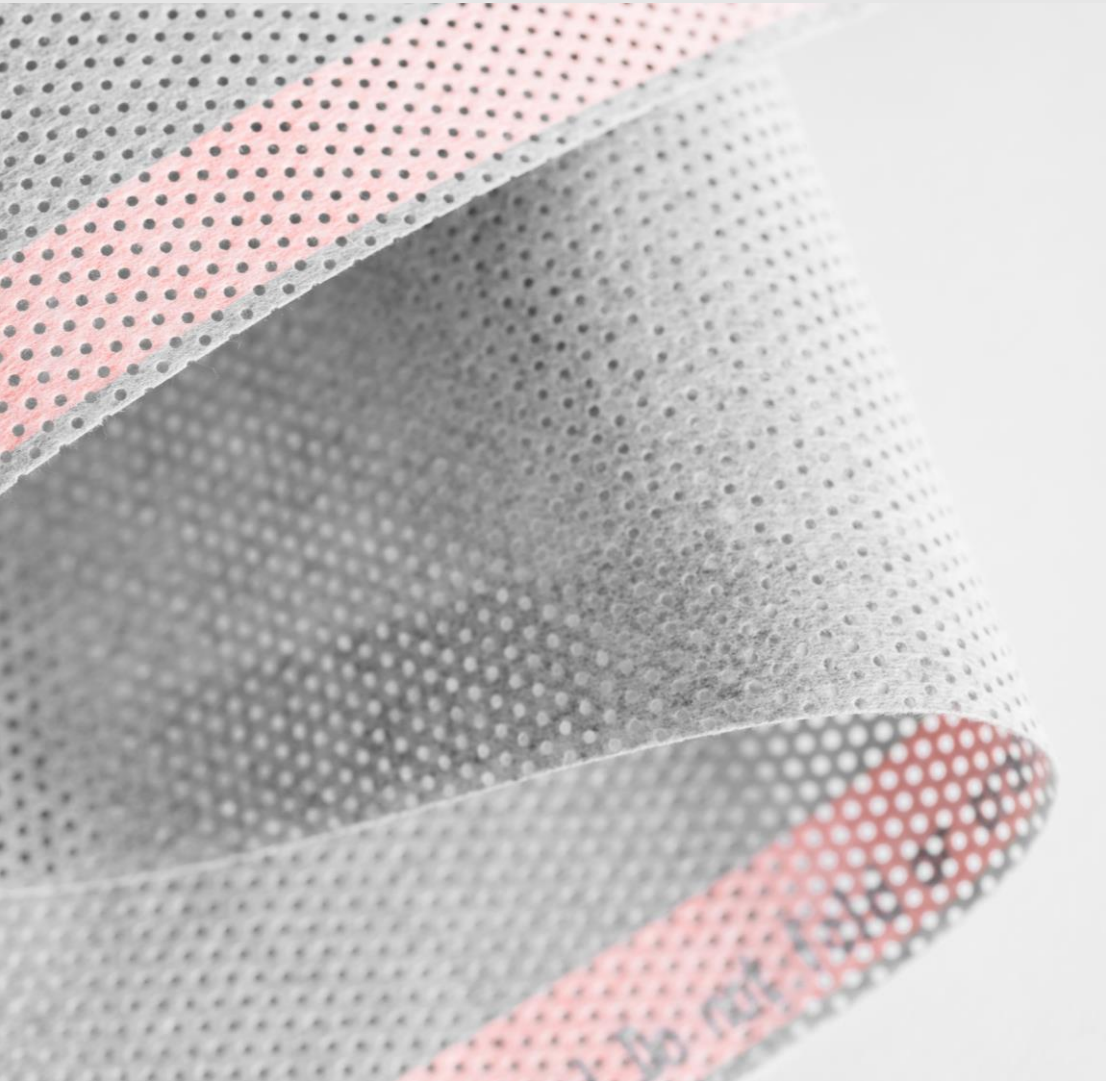
Power Supply 36 V

+

Open Interface  
for control **engineering**

Problem-free integration of the ælectra system into a technical environment

# ælectra AT A GLANCE



Carbon + PET = electrical resistance

Conversion of electrical energy into 100% heat

100% adaptable to the property through  
different performance variants

Radiant heat for the best feel-good climate

Long service life + maintenance-free

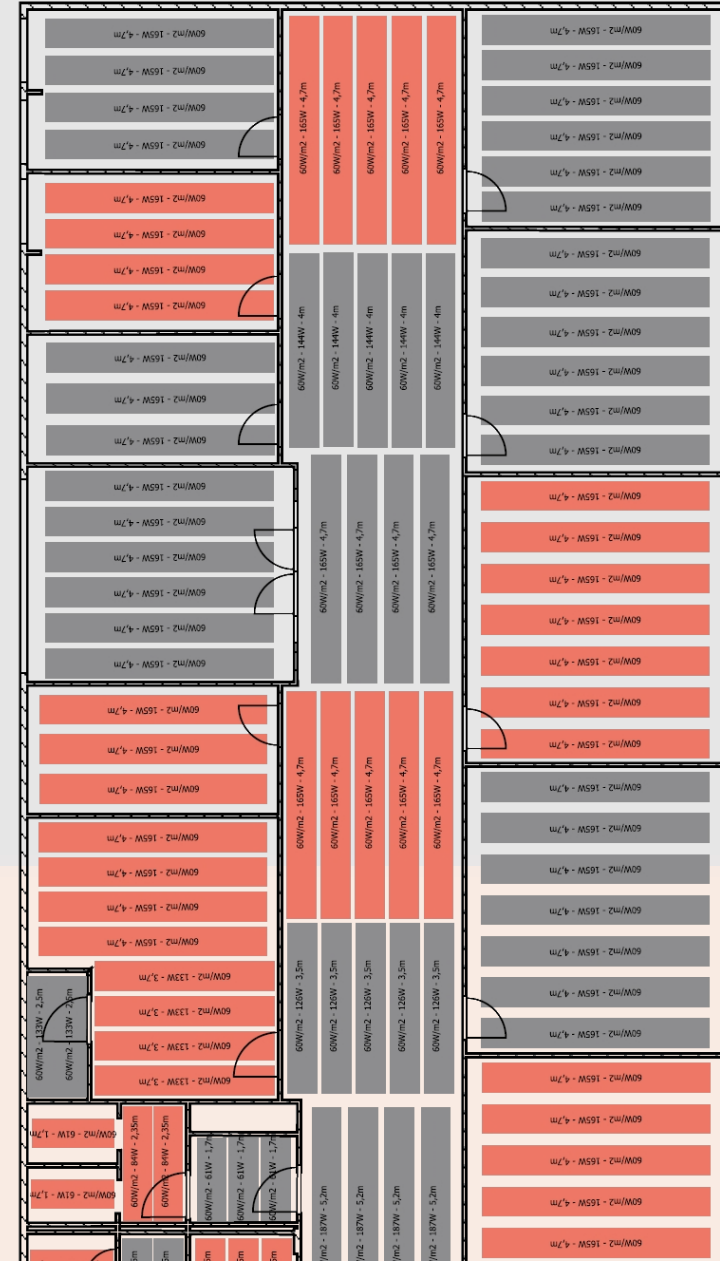
# ADAPTABLE

Modular & precise control for heating-on-demand

Maximum accuracy of fit between heat demand and installed power

Thin and flexible structure for easy installation on walls, ceilings and under the floor

ælectra adapts to requirements – not the other way around



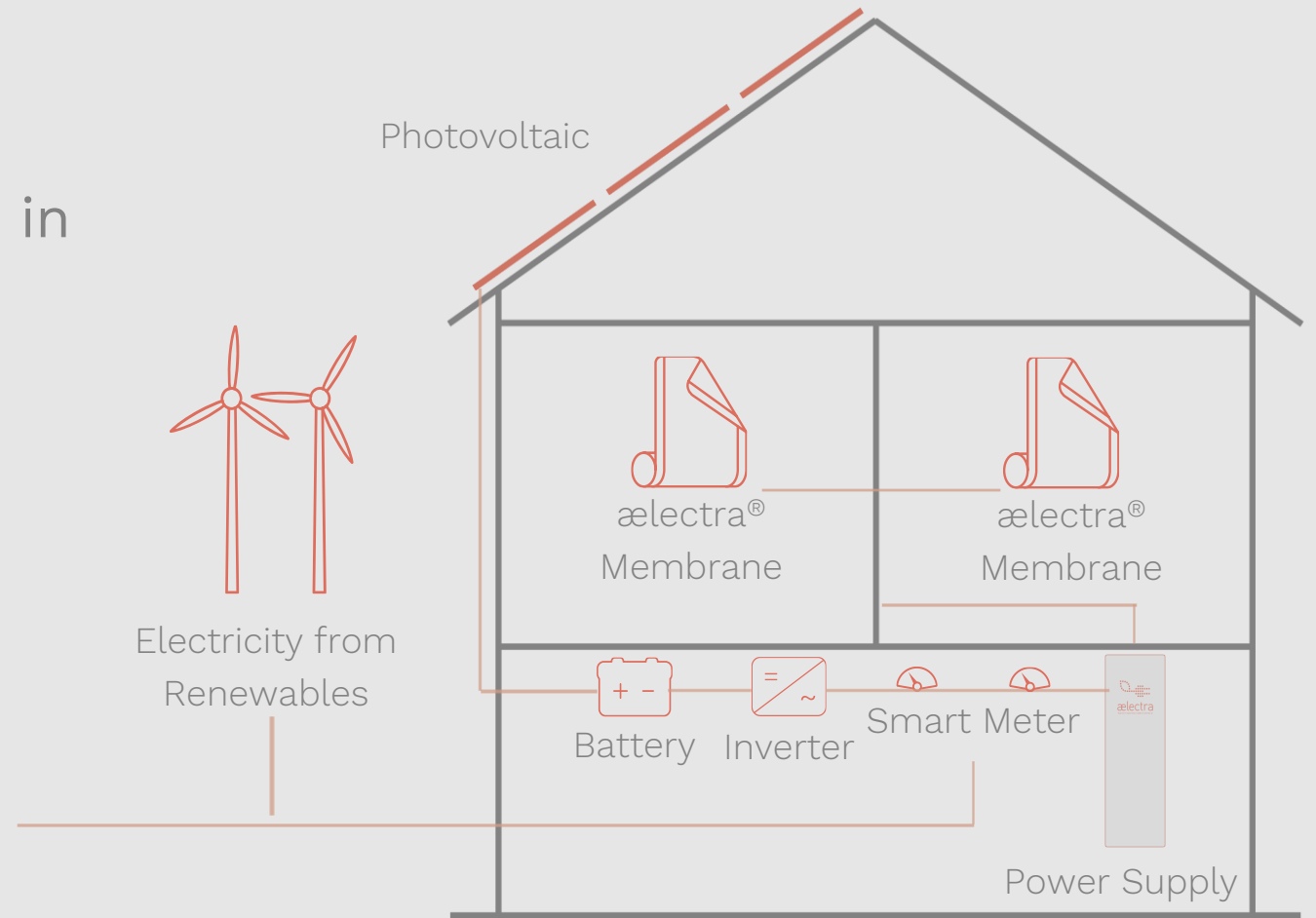
# COMPATIBLE

100% compatible with all stakeholders in the energy transition

100% open to all future developments

100 % digital and Smart-Home-Ready

100% emission-free in operation with renewable energies



ælectra is the technical answer to the challenge of sector coupling



# SCALABLE

Demand-Side-Management

Contribution to grid stabilization

New, CO<sub>2</sub>-free district heating

Smart Neighbourhood / Smart City



ælectra enables sustainable solutions for neighbourhoods and power grids

# ENTITLED FOR FUNDING

Conformity with Directive 2010/31/EU on the energy performance of buildings

German efficiency standards (GEG) are achieved

Funding is possible by German development bank KfW

STANDARD BUILDING INSULATION	STANDARD BUILDING TECHNOLOGY	ALTERNATIVES HOT WATER SYSTEM	ACHIEVABLE EFFICIENCY STANDARD
KFW 55	ælectra heating photovoltaic heat recovery	hot water heat pump	KFW 55
		heating rod	GEG
		continuous-flow water heater	GEG
KFW 40	ælectra heating photovoltaic heat recovery	hot water heat pump	KFW 40
		heating rod	KFW 55
		continuous-flow water heater	KFW 55
KFW 40plus	ælectra heating photovoltaic heat recovery battery	hot water heat pump	KFW 40plus
		heating rod	KFW 55
		continuous-flow water heater	KFW 55

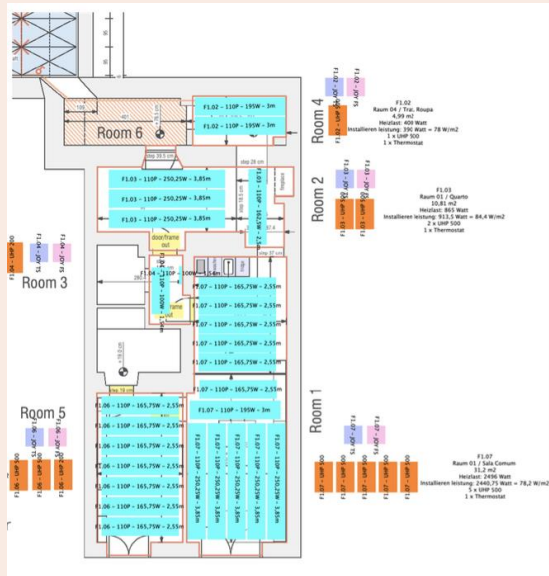
ælectra fits into EU/German efficiency standards and funding programmes



# REFERENCES IBERIAN PENINSULA



Installation in existing building  
B2C project  
Wall heating  
2018  
Lissabon, Portugal



Installation in existing building  
B2C project  
Floor heating  
2021  
Lissabon, Portugal

# FUTURE IN SPAIN

Furnishing of existing buildings with no heating

Replacement of old heating in existing buildings

CO2-free heating by usage of wind and photovoltaic energy

Heating of new, low-energy buildings with low technical impact

Heating-on-demand in public buildings and for commercial use



# CONTACT



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