WÄRMEPUMPEN IN MEHRFAMILIENHÄUSER

Lösungsvorschläge international

Dr.-Ing. Marek Miara

Mehrfamilienhäuser und Wohnkomplexe mit großen Wärmepumpen (Webinar III)

17.06.2020

Fraunhofer ISE

Die Themen

1 IEA HPT, Annex50

2 Charakteristik der Länder, Barrieren

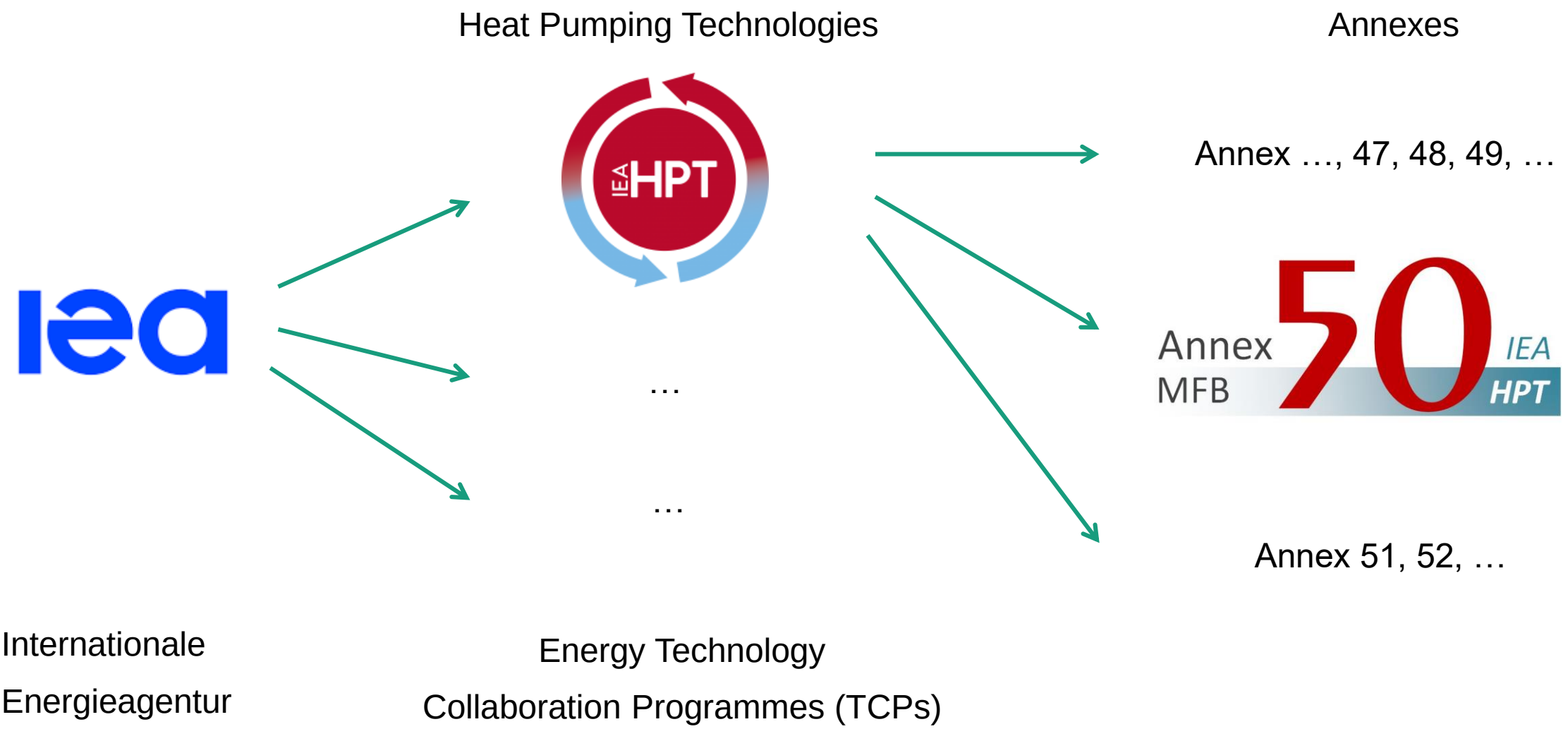
3 „Matrix tool“

4 Lösungsgruppen

5 Beispiele aus der Praxis

6 Vision – online tool “solution finder”

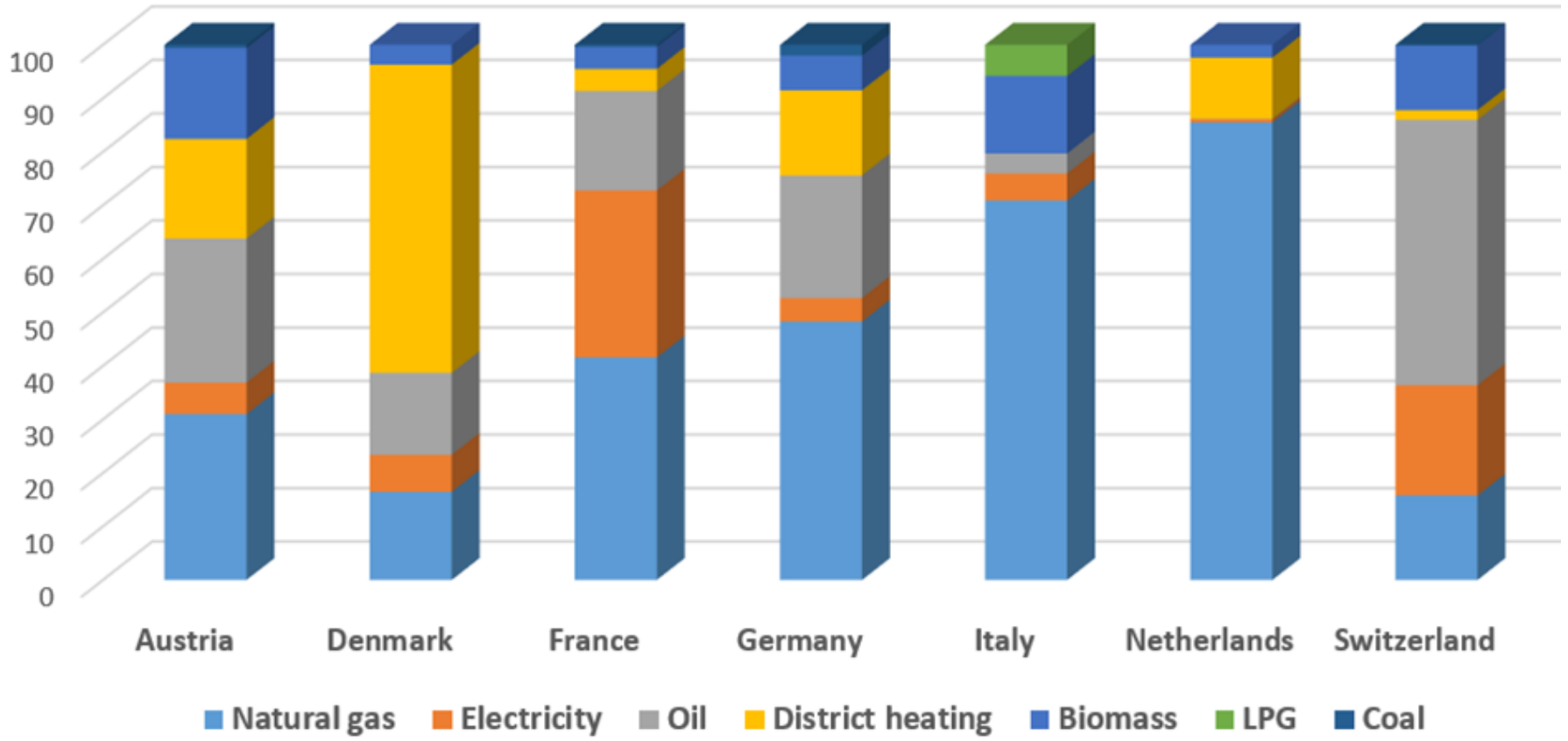
IEA Network


Heat Pumping Technologies
Annexes
IEA HPT
Annex …, 47, 48, 49, …
…
…
Annex 51, 52, …
Internationale
Energieagentur
Energy Technology
Collaboration Programmes (TCPs)

Annex 50
Key facts

- Dauer: Annex 50 endet am 31.12.2020
- Teilnehmer:
  - Deutschland (Operating Agent)
  - Österreich
  - Die Schweiz
  - Niederlande
  - Frankreich
  - Italien
  - Dänemark
- Website: www.heatpumpingtechnologies.org/annex50

Vergleich der Länder (Country reports)
Beispielhafte Auswertung

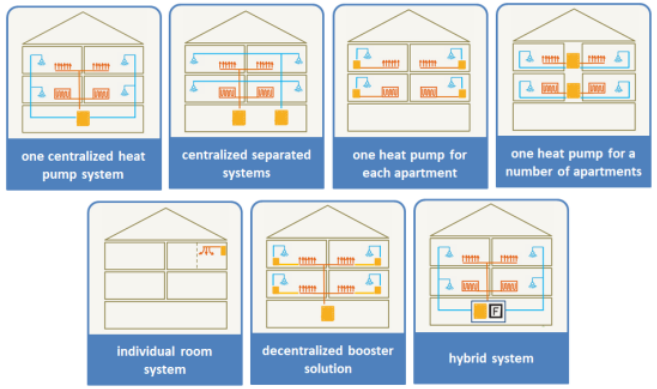


Die Energieträger für die Beheizung von Mehrfamilienhäusern in unterschiedlichen Ländern

Klassifizierung der Lösungen

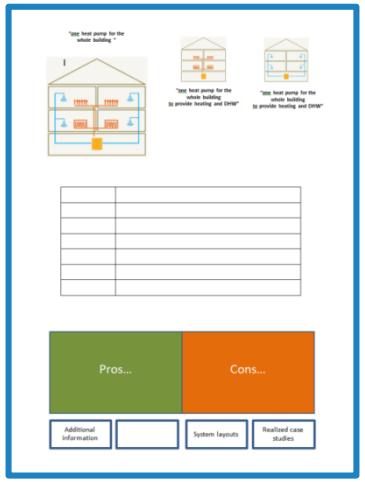
„Matrix tool“

1



Übersicht „Lösungsgruppen”

2

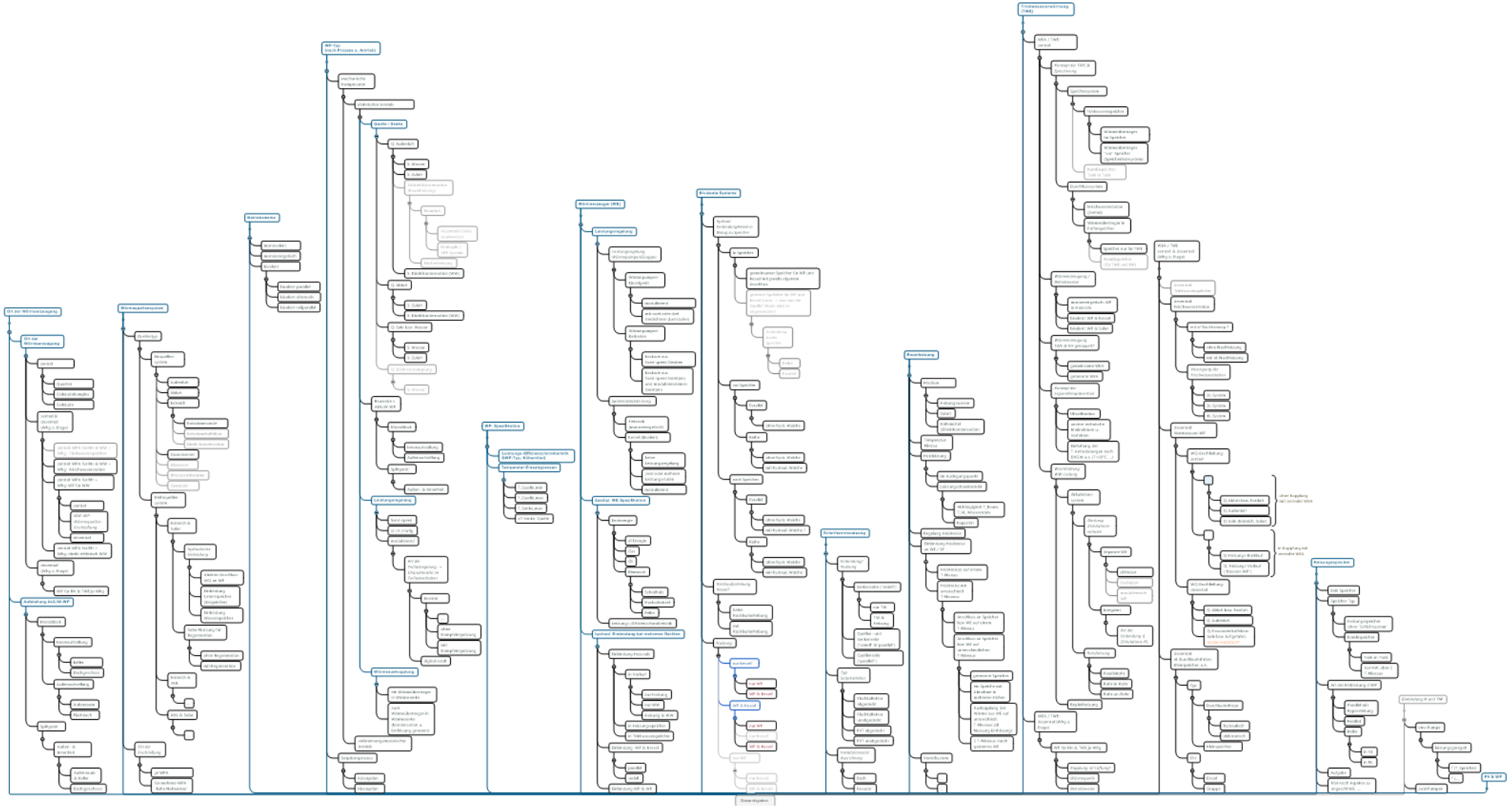


Beschreibung der Konzepte

3

konkrete Praxisbeispiele

Klassifizierung der Lösungen – Anspruch auf Vollständigkeit…



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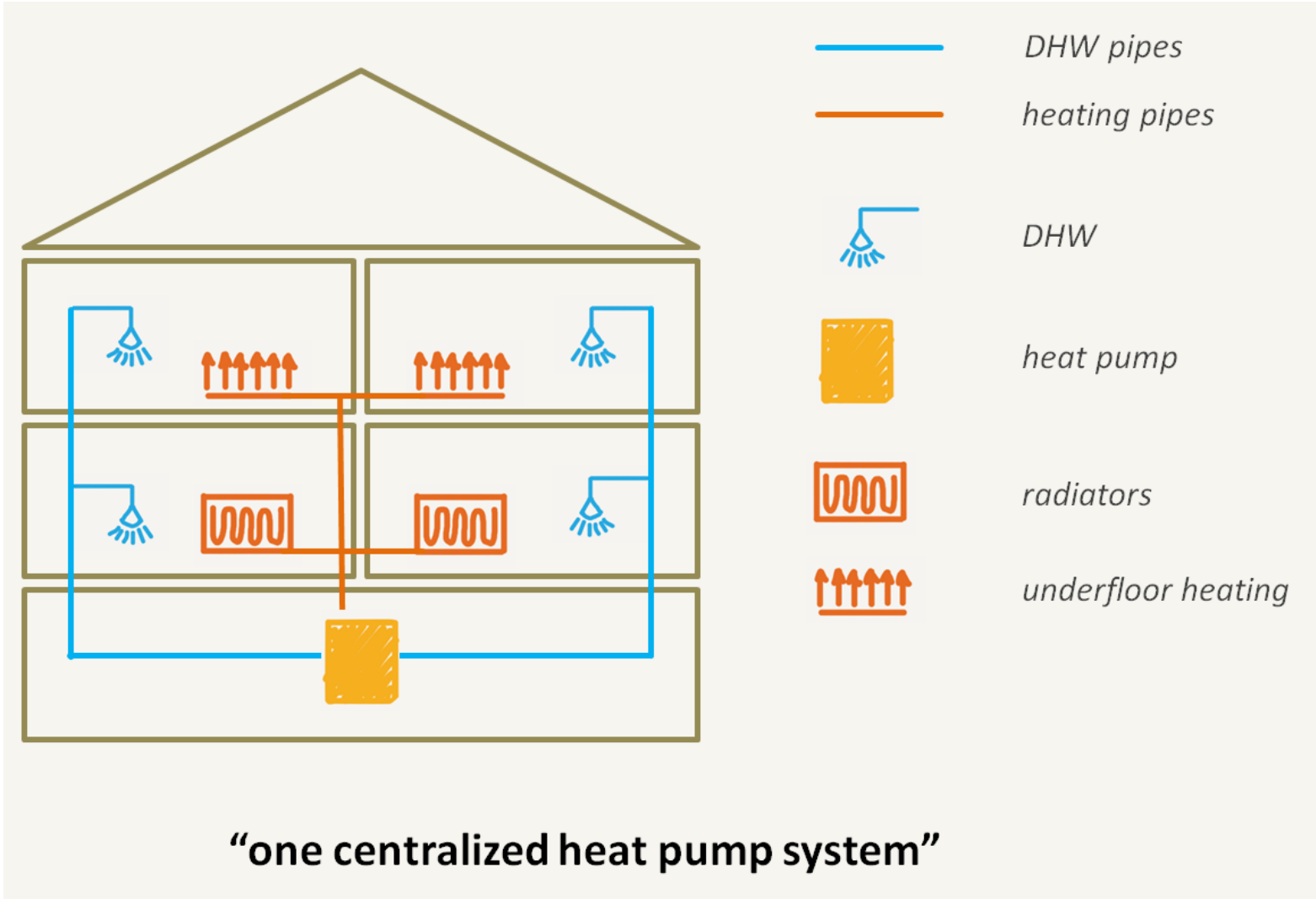
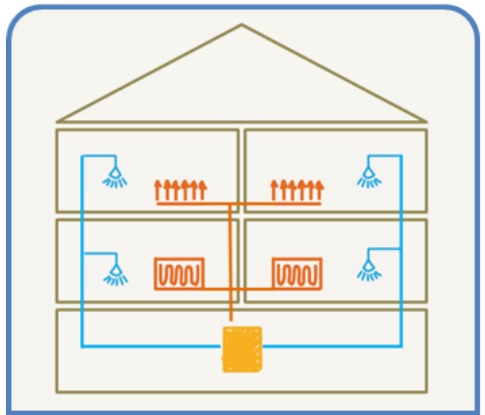
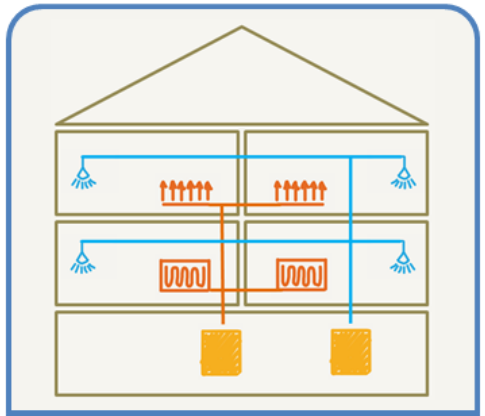


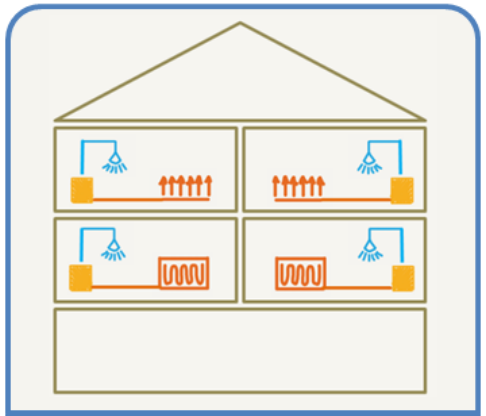
“one centralized heat pump system”



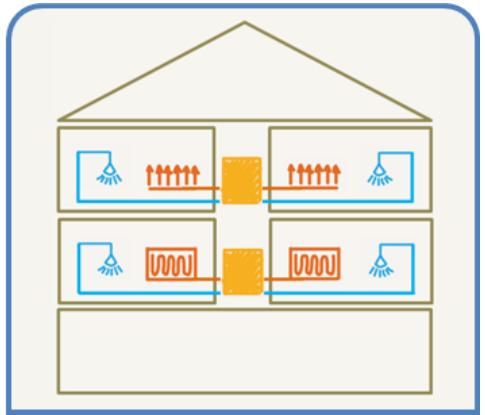
one centralized heat pump system



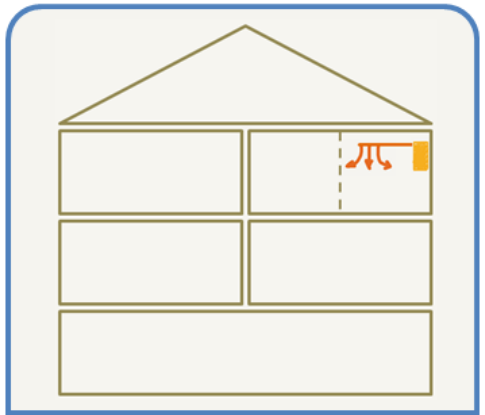
centralized separated systems



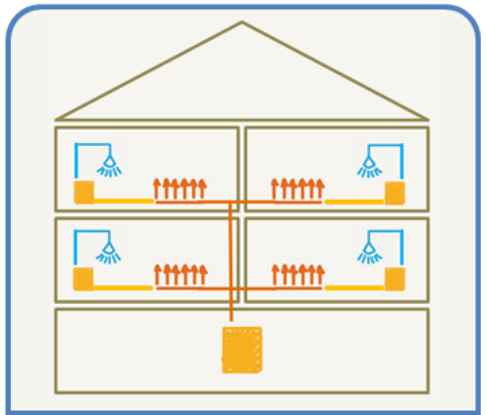
one heat pump for each apartment



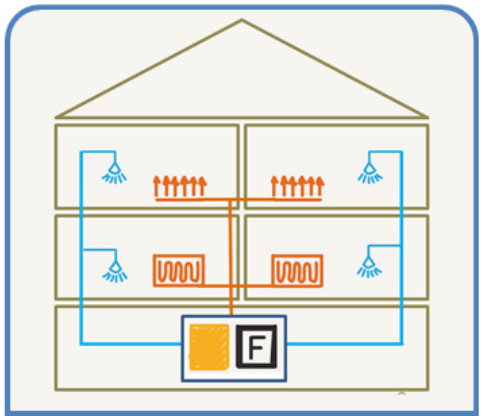
one heat pump for a number of apartments



individual room system



decentralized booster solution

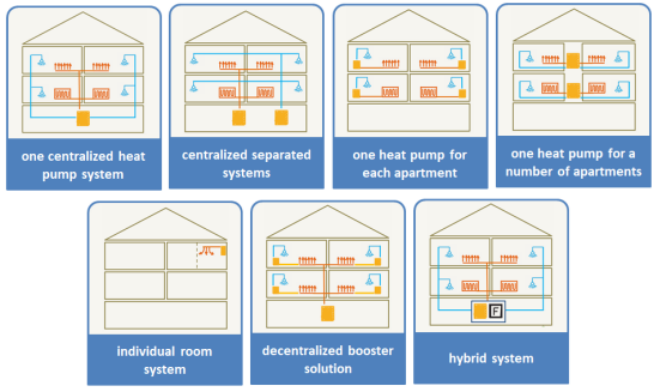


hybrid system

Klassifizierung der Lösungen

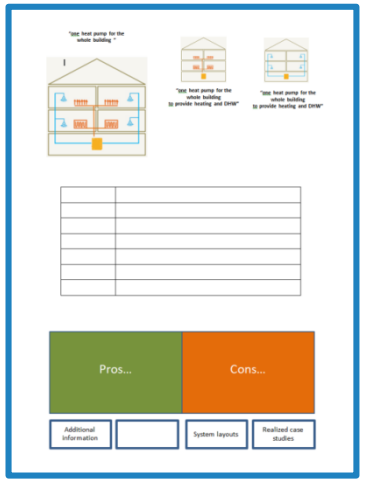
„Matrix tool“

1



Übersicht „Lösungsgruppe”

2



Beschreibung der Konzepte

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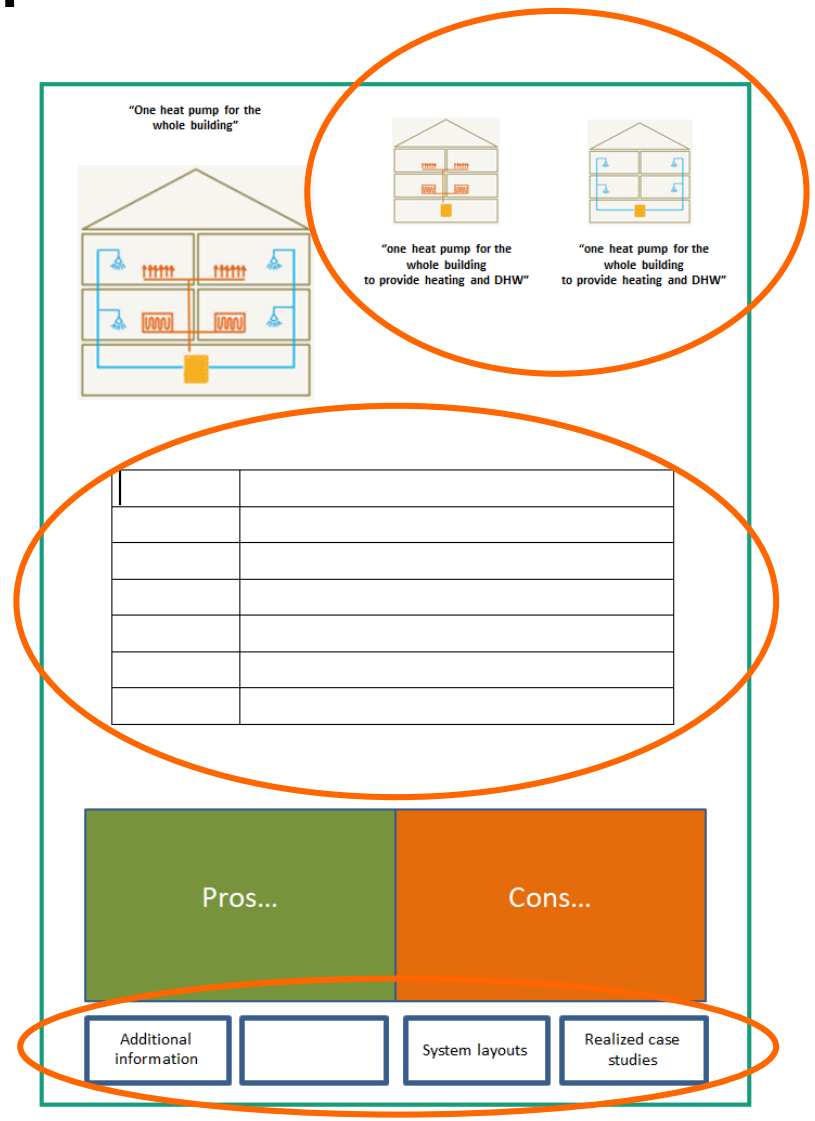


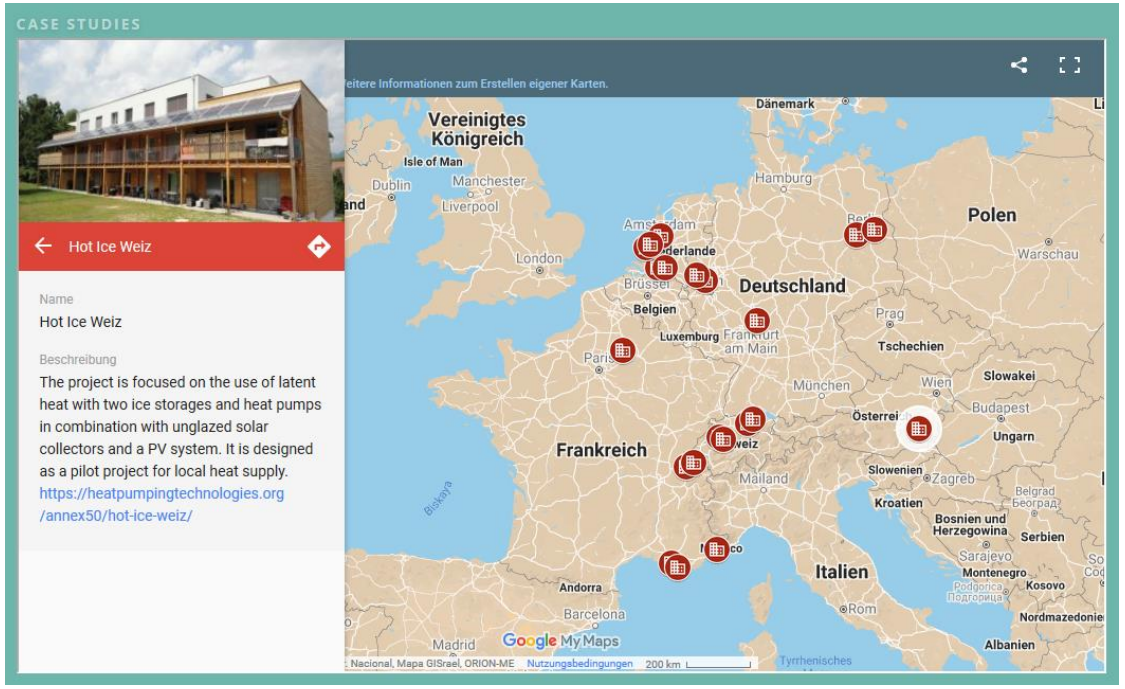
„family members“

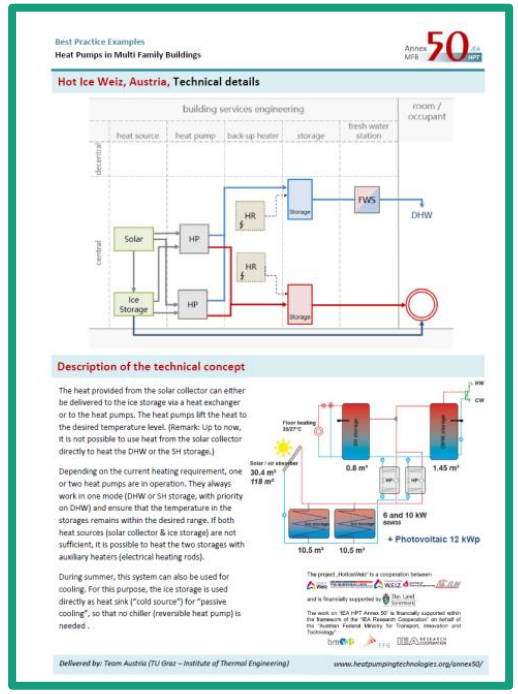
description and “assessment” of the system

additional information and links

Case studies

https://heatpumpingtechnologies.org/annex50/case-studies/





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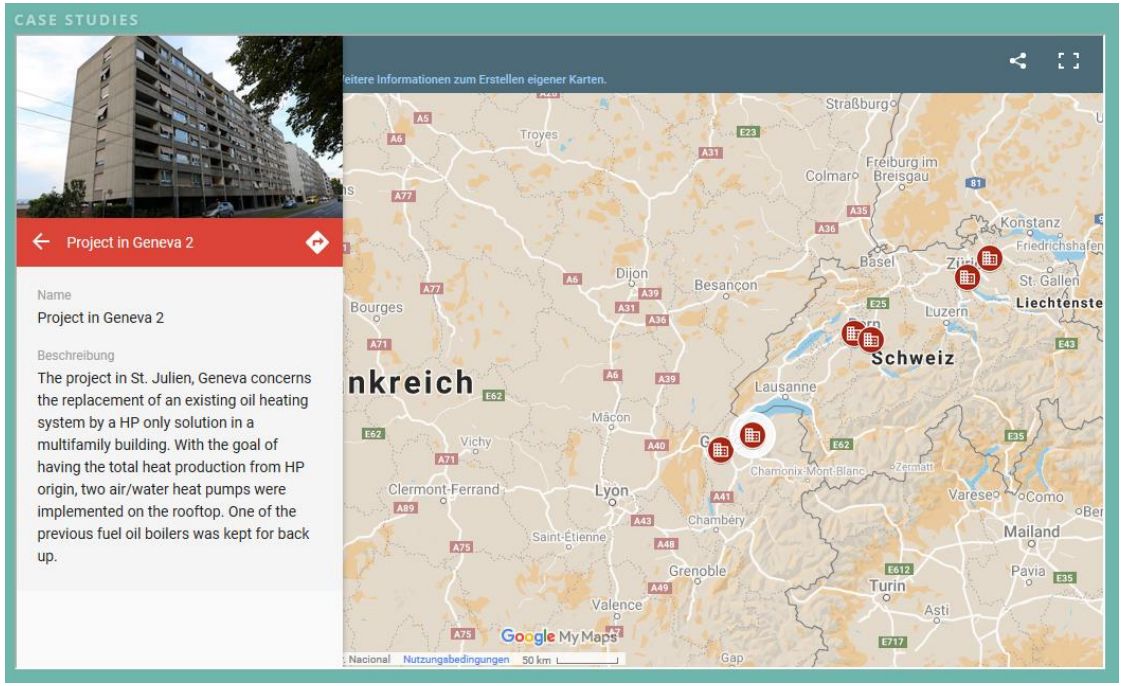
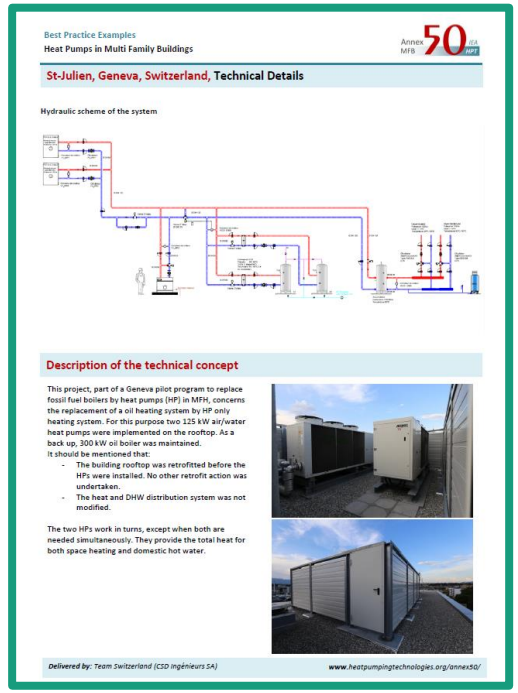
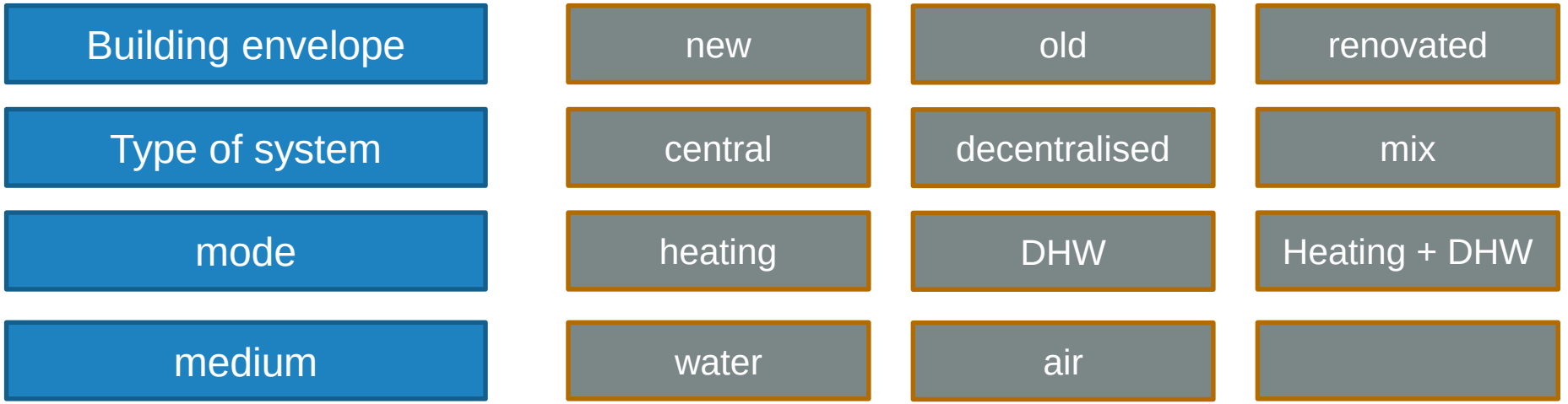




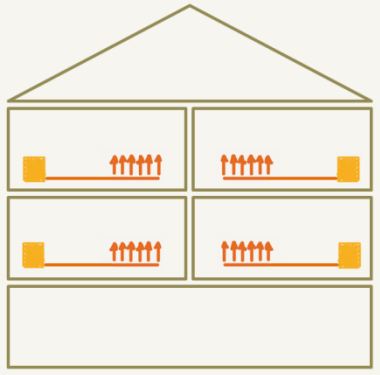
Vision – online tool “solution finder”



Vision – online tool “solution finder”

Building envelope	new	old	renovated
Type of system	central	decentralised	mix
mode	heating	DHW	Heating + DHW
medium	water	air	

Suggested solutions:



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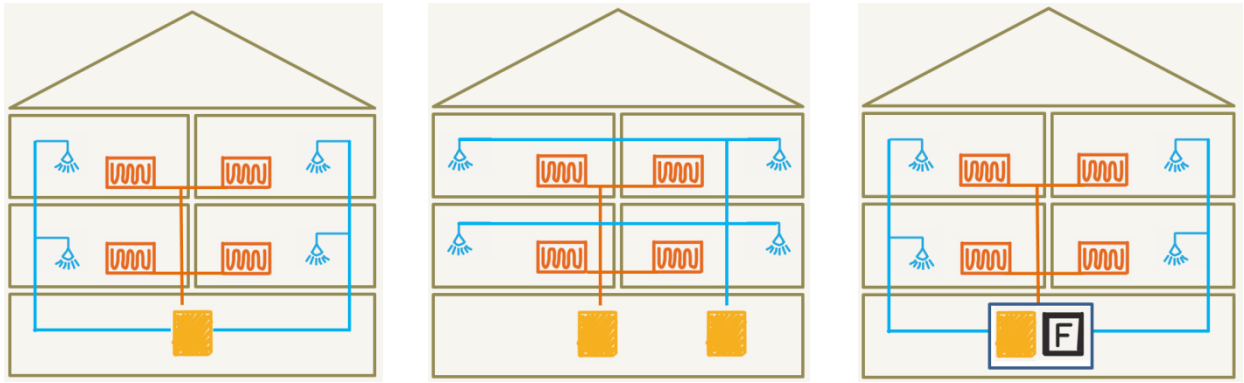

Vielen Dank!

Marek Miara

www.ise.fraunhofer.de

marek.miara@ise.fraunhofer.de