



CE-RISE, INDUSTRY, AND HASSLE

JAHANZEB TARIQ | VISSMANN CLIMATE SOLUTIONS



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
**State Secretariat for Education,
Research and Innovation SERI**

EU Framework Programmes



**UK Research
and Innovation**

VISSMANN
Climate Solutions



**Funded by
the European Union**



CE-RISE, regulation, industry



REGULATORY
LANDSCAPE



INDUSTRY
& HASSLE

Policy landscape overview



EU GREEN DEAL – A roadmap for Europe to become a sustainable economy

REPORTING AND FINANCE



Taxonomy: Defines sustainable activities



**CSRD
Corporate
Sustainability
Reporting
Directive**
Plan to
standardise
sustainability
reporting

ESRS

**European Sustainability
Reporting Standards:** Detailed
requirements for sustainability
(ESG) reporting



**ESRS E5: Resource
use and Circular
Economy** - reporting
standards specifically
related to products and
materials

CIRCULAR ECONOMY AND COMMUNICATION



Circular Economy Action Plan: Introduces the actions to
make sustainable products the norm in the EU

ESPR

**Ecodesign for
Sustainable
Products
Regulation:** Will set
specific sustainability
product requirements

CPR

**Construction
Product Regulation:**
Will set sustainability
requirements for
construction products

Green claims

To communicate
environmental
performance, it will be
required evaluate
products with a
**Product
Environmental
Footprint (PEF)**

... **OTHER RELEVANT
INITIATIVES :**

Critical Raw Materials Act

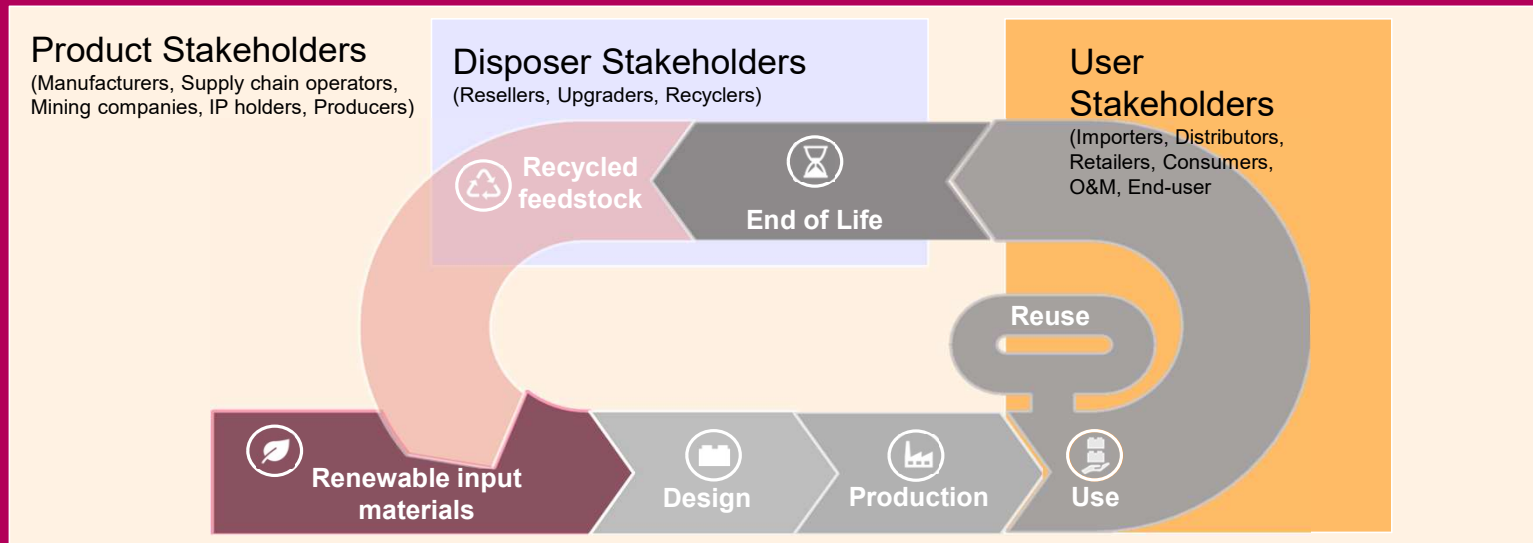
Chemicals Strategy

Battery regulation

Includes only policies thought to be most relevant to design requirements

Players involved requiring and providing data

Stakeholders

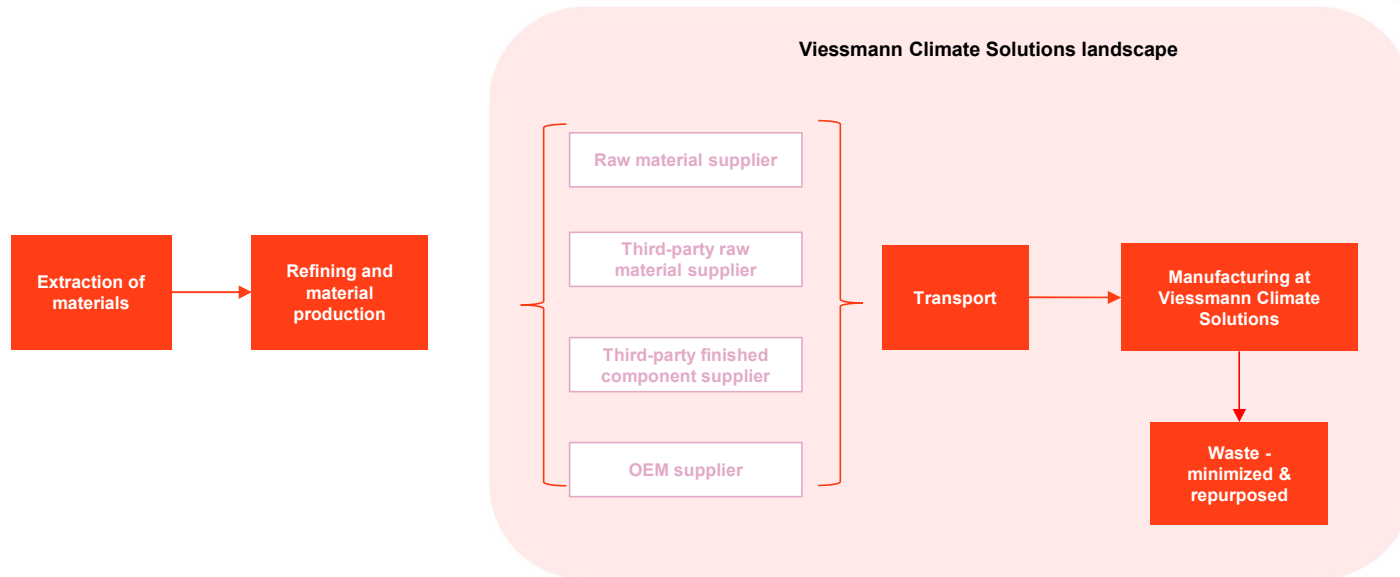


Economic Stakeholders (Industry, Trade unions, Businesses, SMEs, Business associations)

Societal Stakeholders (Public, Academic institutions, Consumer associations, Public interest organizations)

Governance Stakeholders (EU commission, Policy Makers, National Competent Authorities)

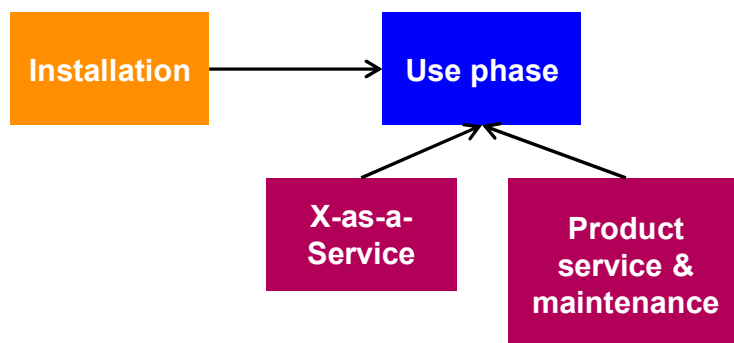
Upstream value chain



- Data:**
- Supply chain transparency (including supplier code of conduct)
 - BOM
 - CRM/SRM identification
 - PFAS identification
 - Conflict minerals identification
 - Rare earth magnets identification
 - Hazardous material identification
 - ESRS E5-4/E5-5 disclosure compliance
 - Contain any third-party EPD certification

Make 80% of the difference

Installation and use phase



PRODUCT INFORMATION

- Energy label and Eco design
- Installation & service instructions
Connection and wiring diagram
- Maintenance checklist
- Operating instructions for system operator
- Product datasheet
- Product warranty
- Service & repair instructions for contractors
- Compliance to ROHS, REACH, and WEEE
- Mention of reused/refurbished components

DETAILS FOR CUSTOMER

- Purchase history
- Repair & maintenance history
- Installation partner information
- O&M partner information
- Safety instructions
- Feedback form for engagement
- RE-strategies participation

Slide 74

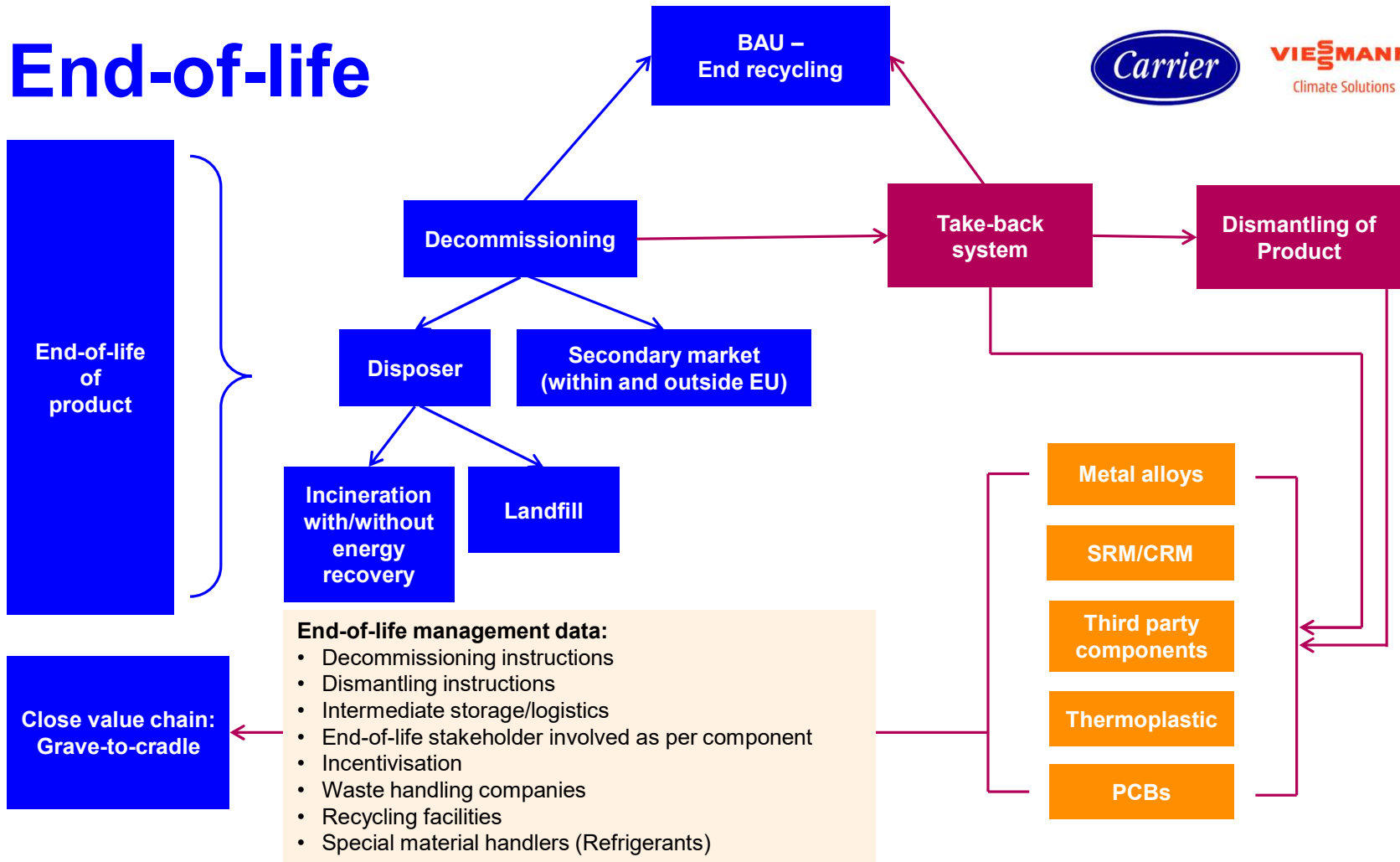
NK0 JT, is this closely related to Viessmann or can I change the colours (CE-RISE branding)?

Nanett Kalapos, 2024-06-12T14:42:20.259

Ja0 0 you can change the colors. No problem

Jahanzeb_Tariq, 2024-06-12T15:34:48.542

End-of-life



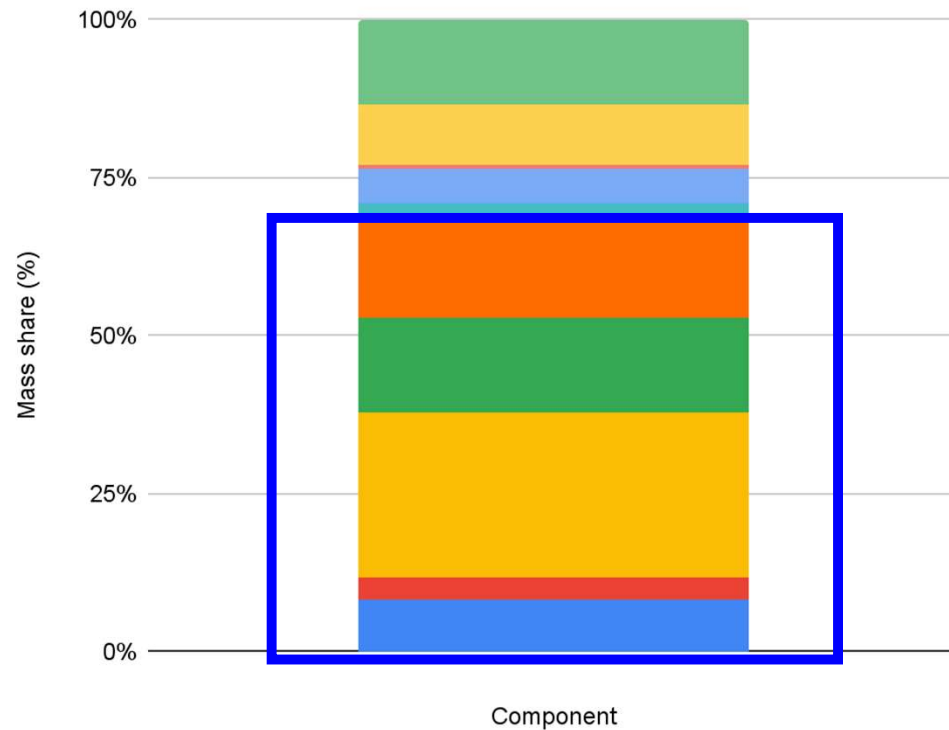
Greater good



Translate circularity to monetary benefit = Circular business models

Mass of component - Indoor unit Vitocal 100-S(kg)

- Packaging
- VM Vitocal 100-S
- PCB
- Water pump
- Electric heater Kawai
- Hydroblock assembly
- Condenser group assembly - IDU
- Steel sheet assemblies
- Copper pipe assemblies
- Diaphragm vessel

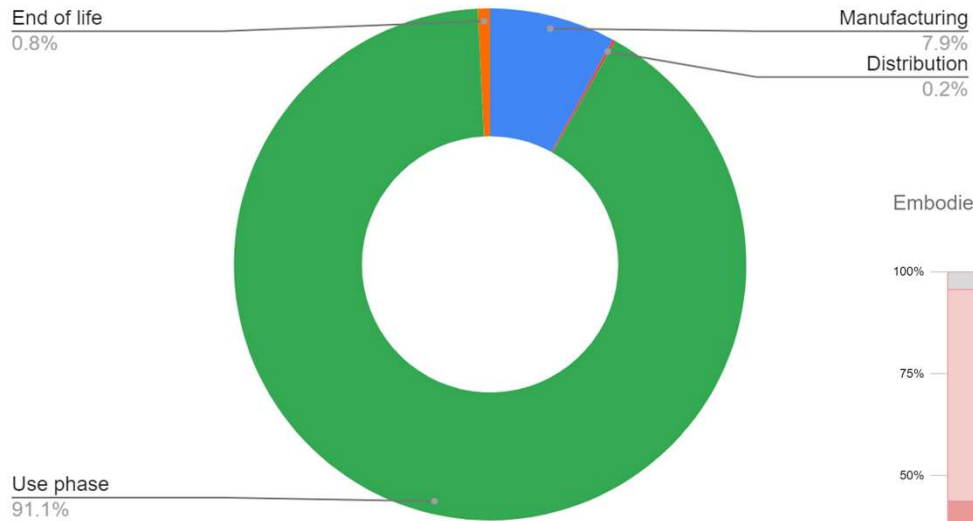


Metal

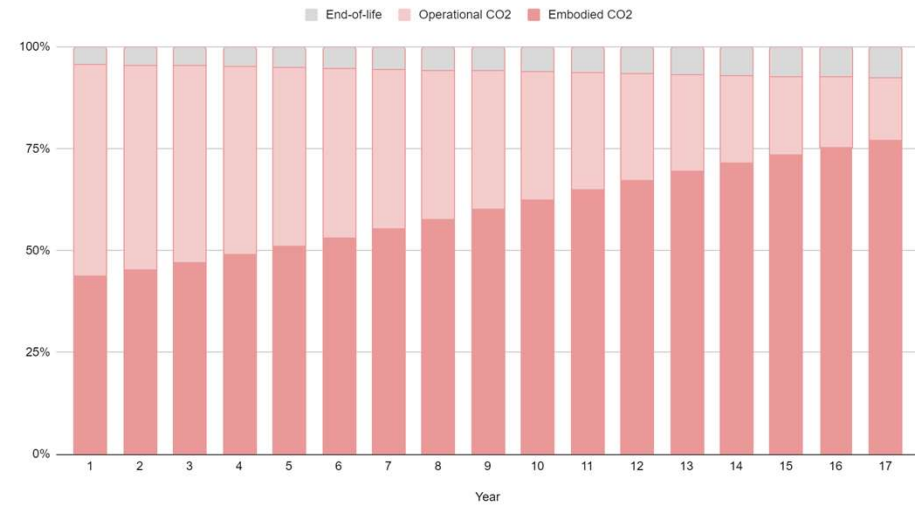
Environmental hot spots – heat pump



Heat pump (Vitocal 100-S) life cycle hot spots



Embodied CO2, Operational CO2 and End-of-life



Heat pump circularity identification



1. Buffer tank
2. Diaphragm vessel
3. Motor
4. Water pump

Indoor unit

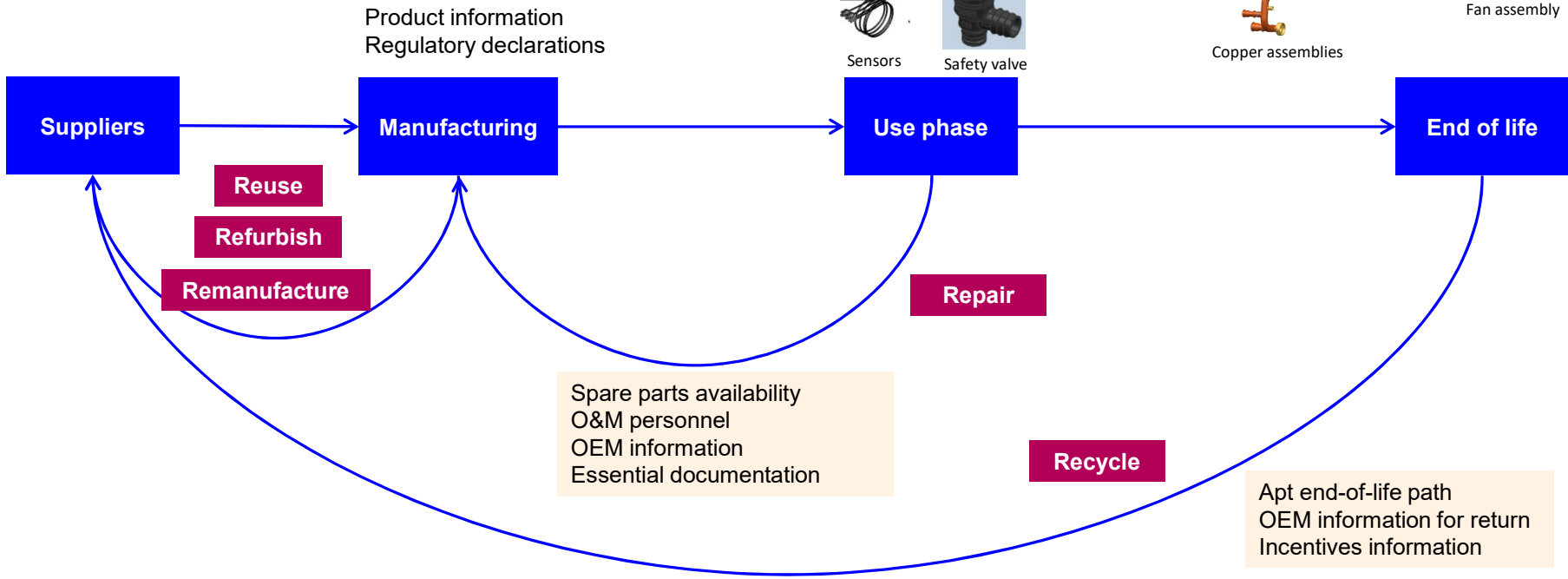
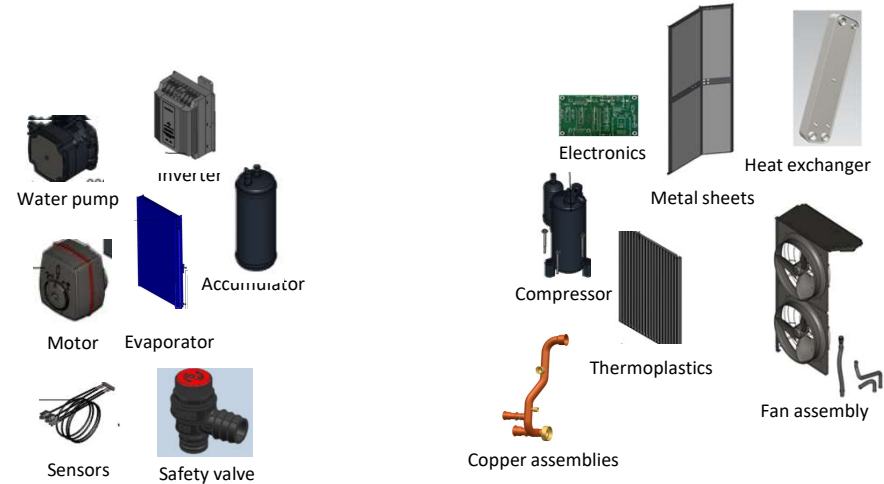


1. Accumulator
2. Fan
3. Refrigerant circuit containing:
 - a. 2 heat exchangers
 - b. Accumulator
 - c. Compressor
 - d. Electronic inverter
 - e. Copper pipes
 - f. Aluminum heat sinks
 - g. Thermoplastics
 - h. Insulation
4. Metal sheets (outer covering)

Outdoor unit



CE-RISE enabling RE-strategies



CE-RISE Information System

Thank you!



CE-RISE Project



CE_RISE_Project



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