Assessing the CO2 saving potential of re-use

Discussion panel 1: Life cycle instruments for regional policies

Oscar Planells
Research Officer, RREUSE
oscar.planells@rreuse.org

06 JUNE 2023 | Brussels
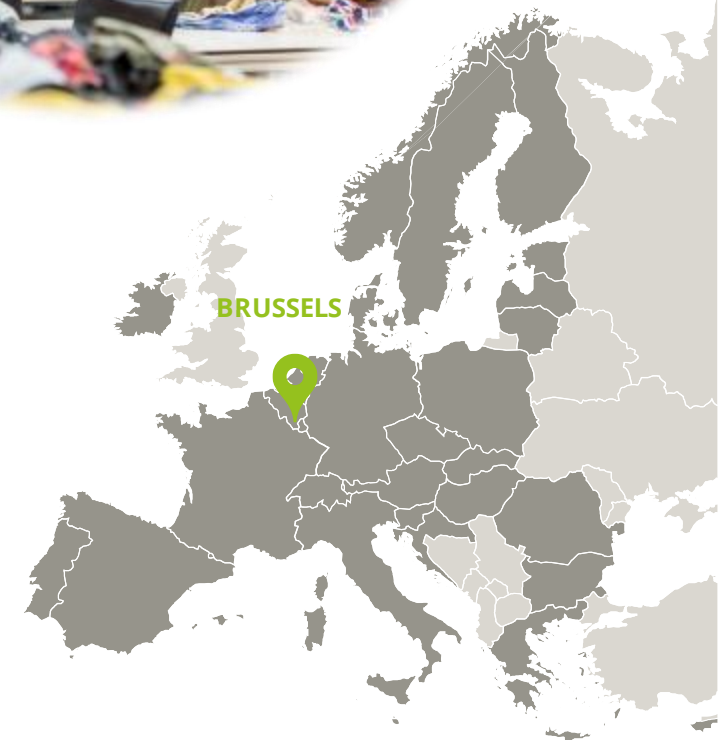
Let me introduce RREUSE

1. Who are we

RREUSE is the European network of social enterprises active in the circular economy.

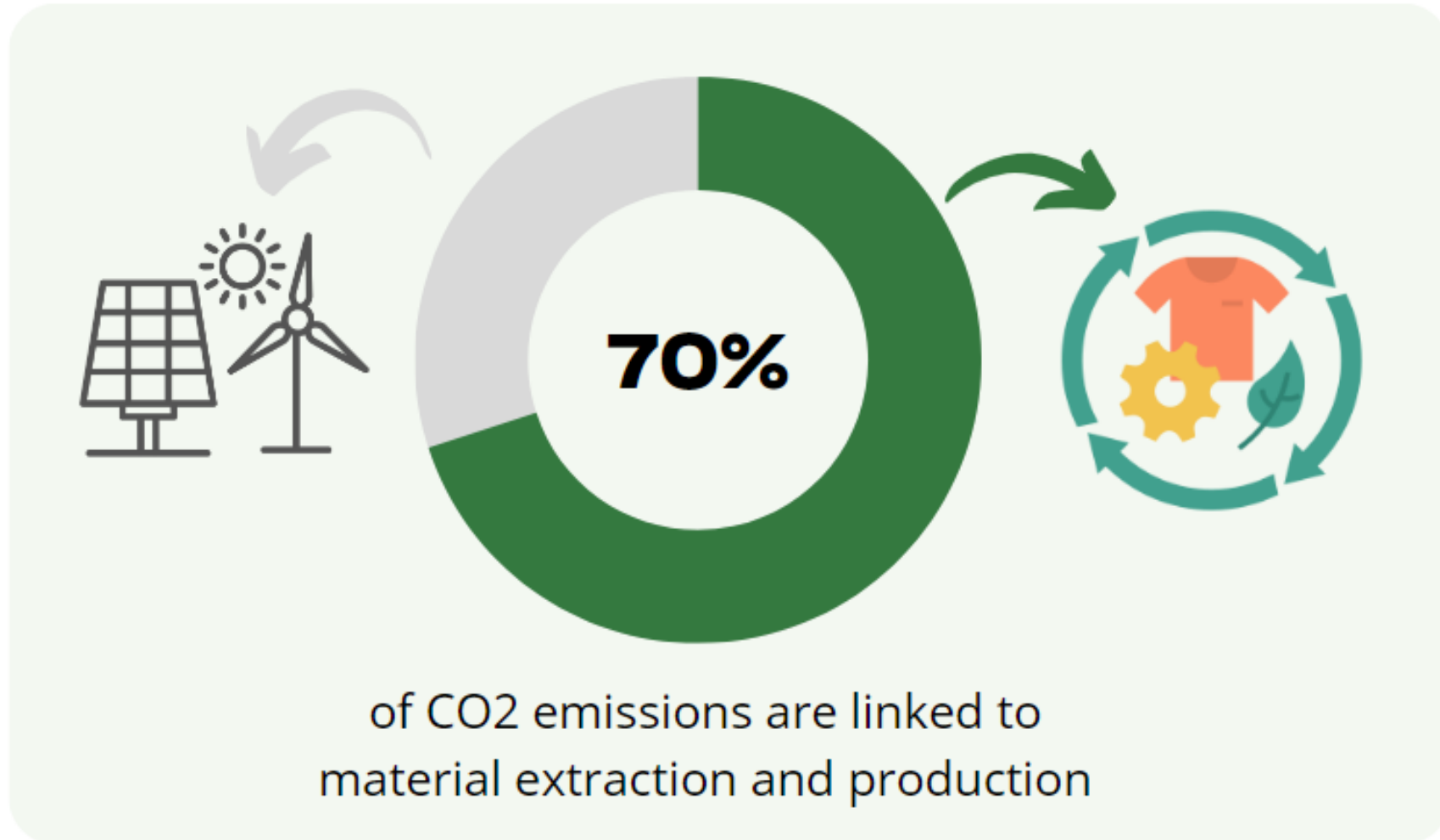Over 1,000 social enterprises collecting 1,2 million tonnes of waste and engaging 105,000 people

2. Our perspective on environmental protection and resource efficiency

Our vision is an inclusive circular economy based on re-use and repair.

BRUSSELS

3. Why is this important?

70% of CO2 emissions are linked to material extraction and production

3. Why is this important?

Move beyond narratives focused (only) on waste prevention

To be clear: re-use is climate action!

Fill the data gaps and disseminate tools available

4. A practical experience: AERESS' CO2 calculator

4. A practical experience: AERESS' CO2 calculator

4. A practical experience: AERESS' CO2 calculator

- First, create a taxonomy (product groups and main categories to be included) to be covered in the calculator. 4 categories: clothes, furniture, electrical, and various.

- Once you have a taxonomy, set the parameters in terms of material composition and average weight of each product group (e.g. jeans, coats, computers, book).

- Once these parameters are clear, calculate emissions factor
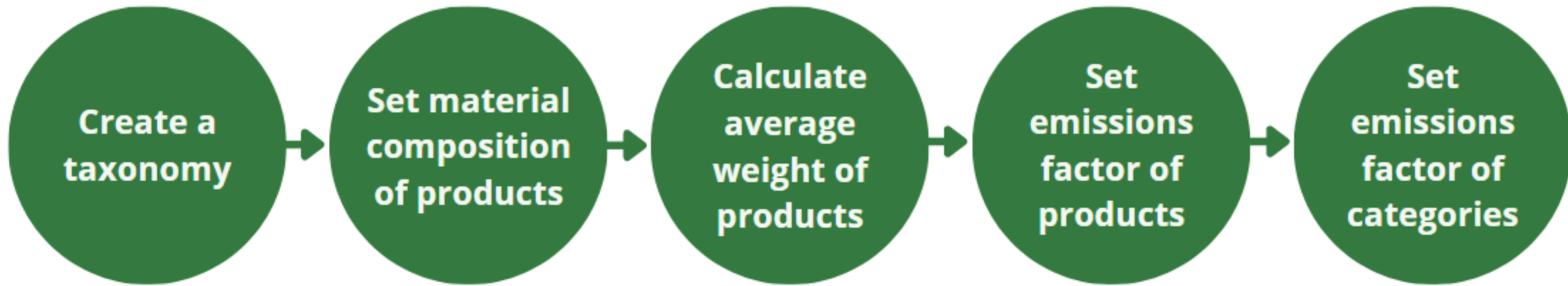
4. A practical experience: AERESS' CO2 calculator

CLOTHES	Jeans	Cotton
	Sweater	Synthetic
	T-shirt	Cotton
	Handbag	Synthetic leather
	Shirt	Cotton and synthetic
	Sneaker	Leather
	Coat	Synthetic
	Trousers	Synthetic
	Skirt	Synthetic
	Home clothes	Cotton

Products	Reference weight (kg / product unit)
Clothes	
Vaqueros –algodón– **Cotton jeans**	0,666
Jersey –sintético– **Synthetic sweater**	1
Camiseta- algodón- **Cotton T-shirt**	0,231
Bolso -piel sintética- **Synthetic leather handbag**	0,556
Camisa -algodón y sintética- **Cotton and synthetic shirt**	0,14
Zapatilla deportiva **Sneakers**	0,38
Abrigo –sintético– **Synthetic coat**	0,63
Pantalón- sintético- **Synthetic trousers**	0,22

4. A practical experience: AERESS' CO2 calculator

Product group	Emission factor (kg CO2-eq avoided / unit of average product)	Emission factor (kg CO2-eq avoided / kg of product)
Clothes	3,060	7,625
Furniture	41,637	1,121
Various	3,551	3,059
Electrical appliances	51,925	3,997

*AERESS estimated the emissions factors based on research already available, not on primary research.

Thank you!

oscar.planells@rreuse.org **// www.rreuse.org**