

FNOB Findings of Carbon Footprint Calculations

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FINNISH NATIONAL OPERA AND BALLET

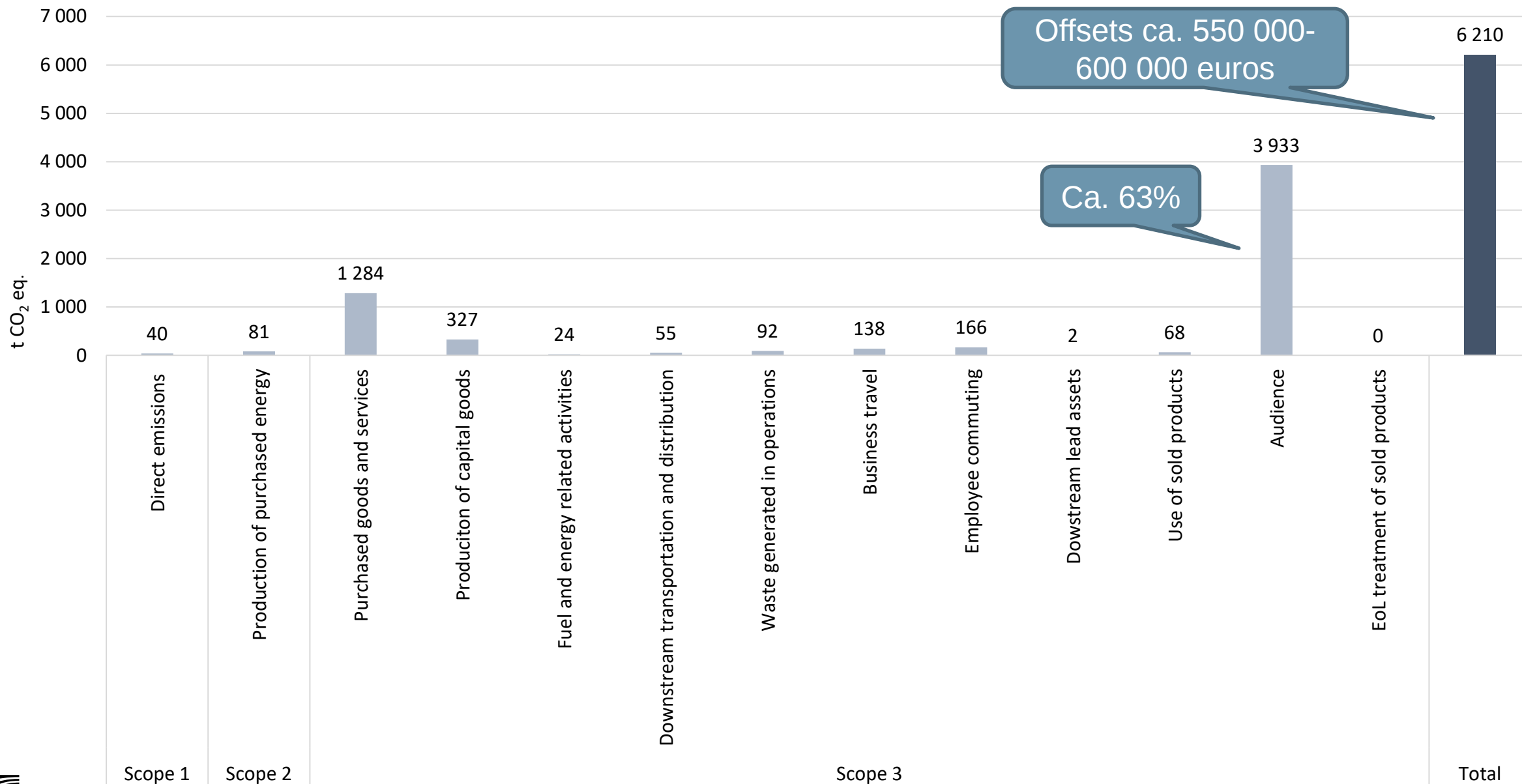


Hiilijalanjäljestä viestiminen

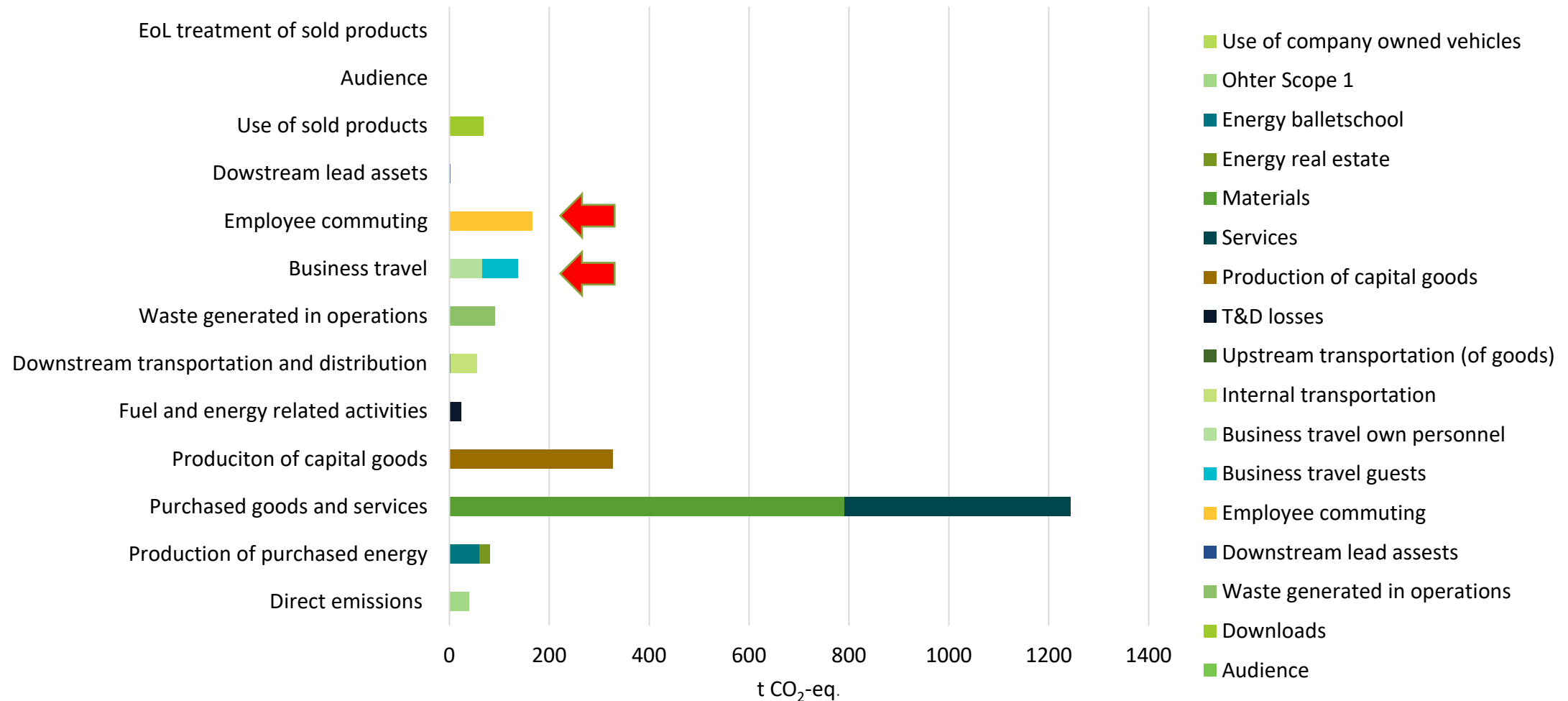
- Tuloksissa esitetään Suomen kansallisoopperan ja -baletin potentiaaliset kasvihuonekaasupäästöt vuonna 2019
 - Tulokset eivät ole absoluuttisia arvoja ja epävarmuudet liittyen tuloksiin tulee huomioida tuloksia tulkittaessa
- Hiilijalanjälki on laskettu perustuen dataan joka on saatu selvityksen tilaajalta eli Suomen kansallisoopperalta ja -baletilta
 - Suomen kansallisooppera ja -baletti on vastuussa datan tarkkuudesta
- Hiilijalanjälki on laskettu GHG-protokollan standardien mukaan (*Corporate standard and Corporate value chain (Scope 3) standard*)
 - Kaikki relevantit kategoriat Scope 3 osalta on sisällytetty laskentaan ja valinta perustui Suomen kansallisoopperan ja -baletin toiminnan kokonaisuuksiin.
- Hiilijalanjälkilaskentaa ja sen raporttia ei ole verifioitu kolmannen osapuolen toimesta
- Hiilijalanjälkilaskennan tuloksista voidaan viestiä kolmannella taholle (muulle kuin laskennan Tilaaja organisaatiolle) kun tulosten esittämisen yhteydessä esitetään tämän dian sisältö.



Carbon Footprint of Finnish National Opera and Ballet 2019



Carbon Footprint Audience Excluded



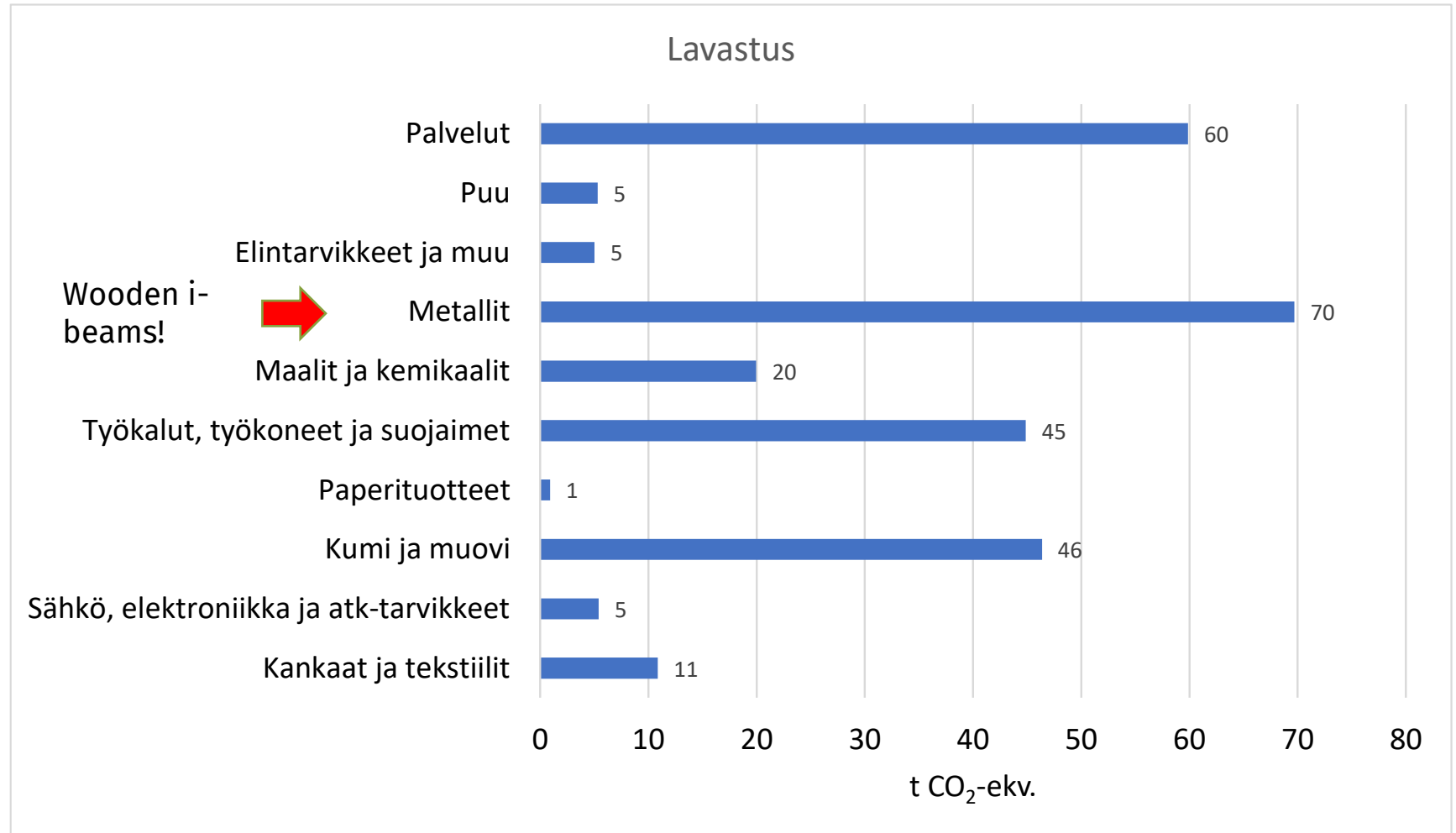
“Green Medication” for the Audience

- Theatre ticket to be valid for public transport
- The possibility to buy a carbon neutral ticket
- Carpooling

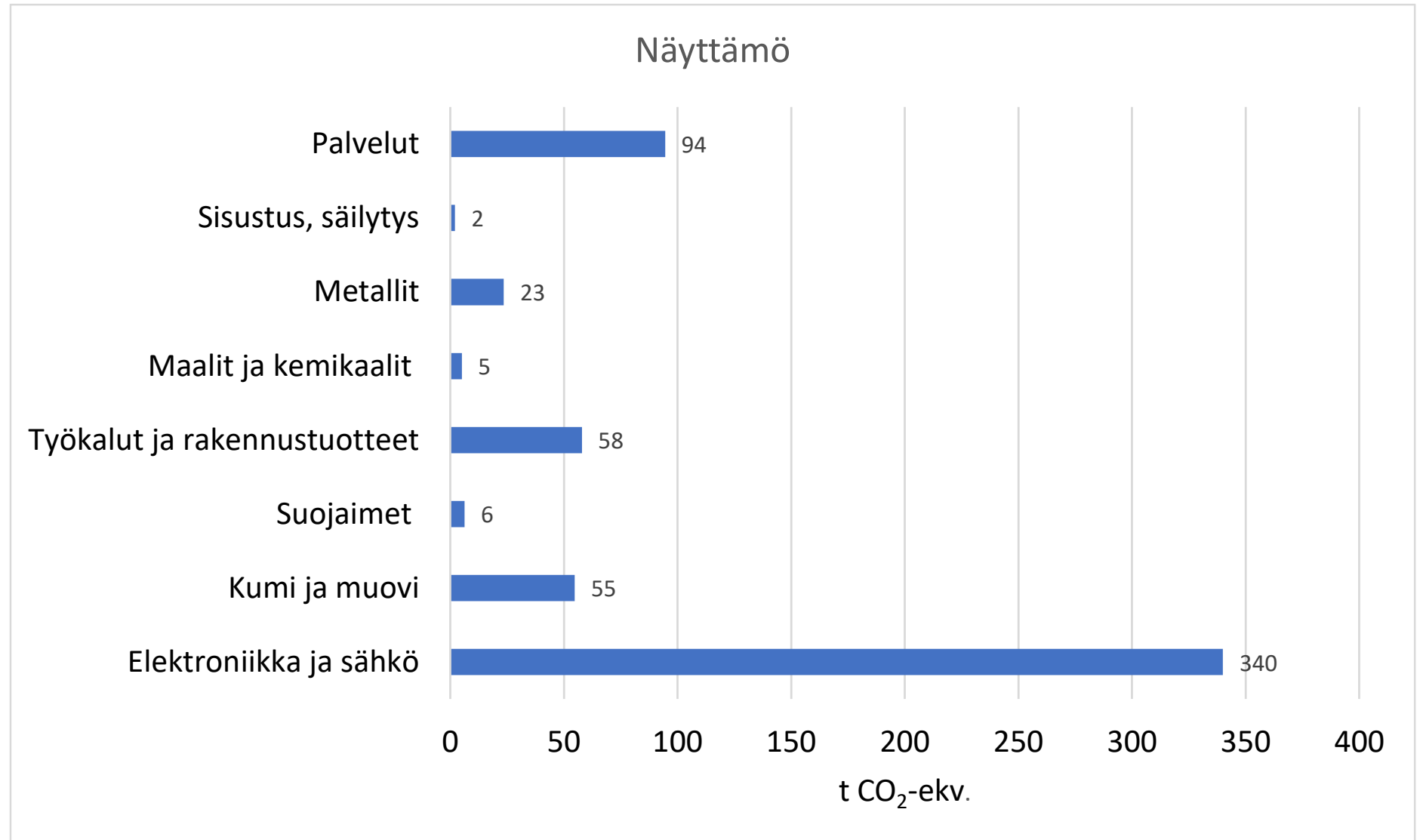


Carbon Footprint – Sets

(Services softwares, IT leasing, rental personnel, cleaning of work clothes, metal work outsourcing etc.)



Carbon Footprint – Stage



THE FINNISH NATIONAL OPERA AND BALLET

Counting the carbon footprint of three main stage productions



Peppi Pitkätossu (Ballet)



Don Giovanni (Opera)

Swan Lake (Ballet)





PEPPI PITKÄTOSSU



PEPPI PITKÄTOSSU / BALLET



PEPPI PITKÄTOSSU / BALLET

Final carbon footprint of set materials in CO₂e
17.11.2021



OOPPERA
BALETTI



16 166kg
CO₂e

Tapio Säkkinen / Head of Set Workshop & Environmental Head





DON GIOVANNI



DON GIOVANNI / OPERA

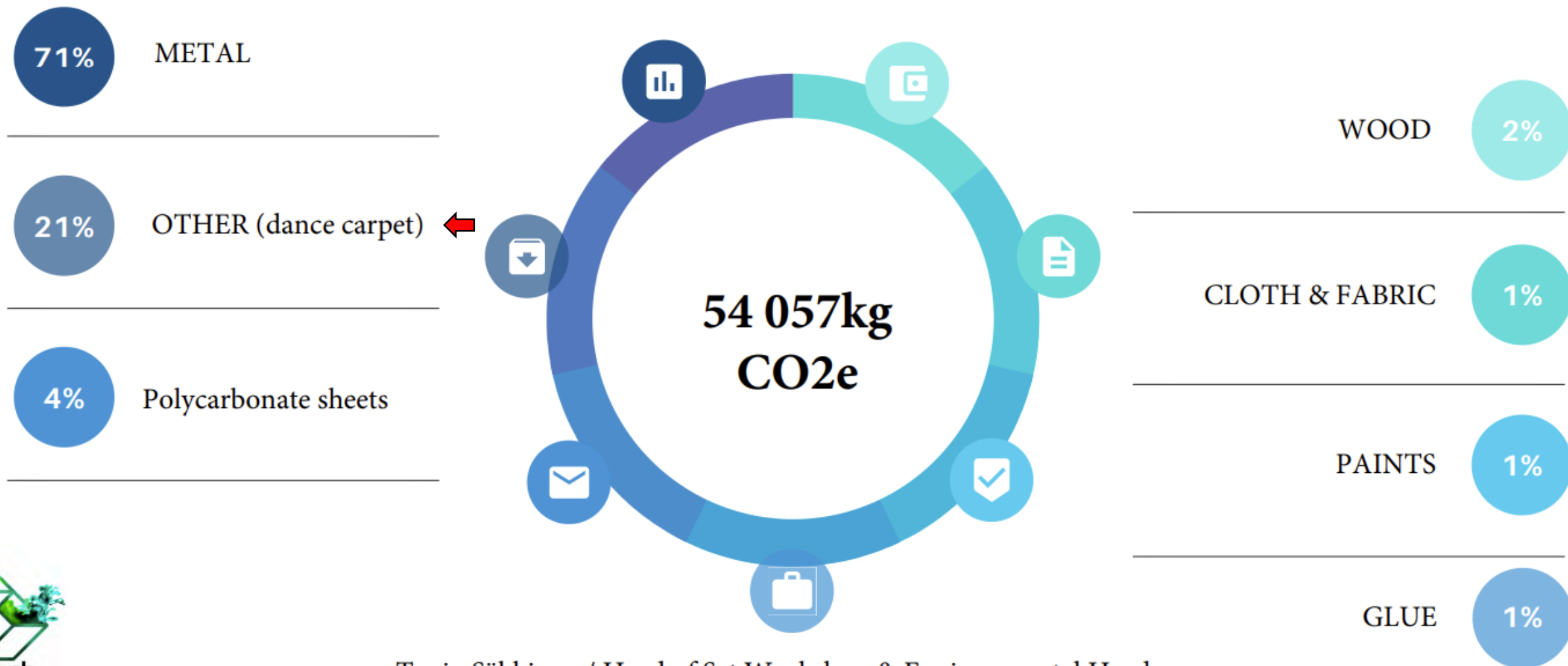


DON GIOVANNI / OPERA

Estimated carbon footprint of set materials in CO₂e
17.11.2021



OOPPERA
BALETTI



Tapio Säkkinen / Head of Set Workshop & Environmental Head





SWAN LAKE

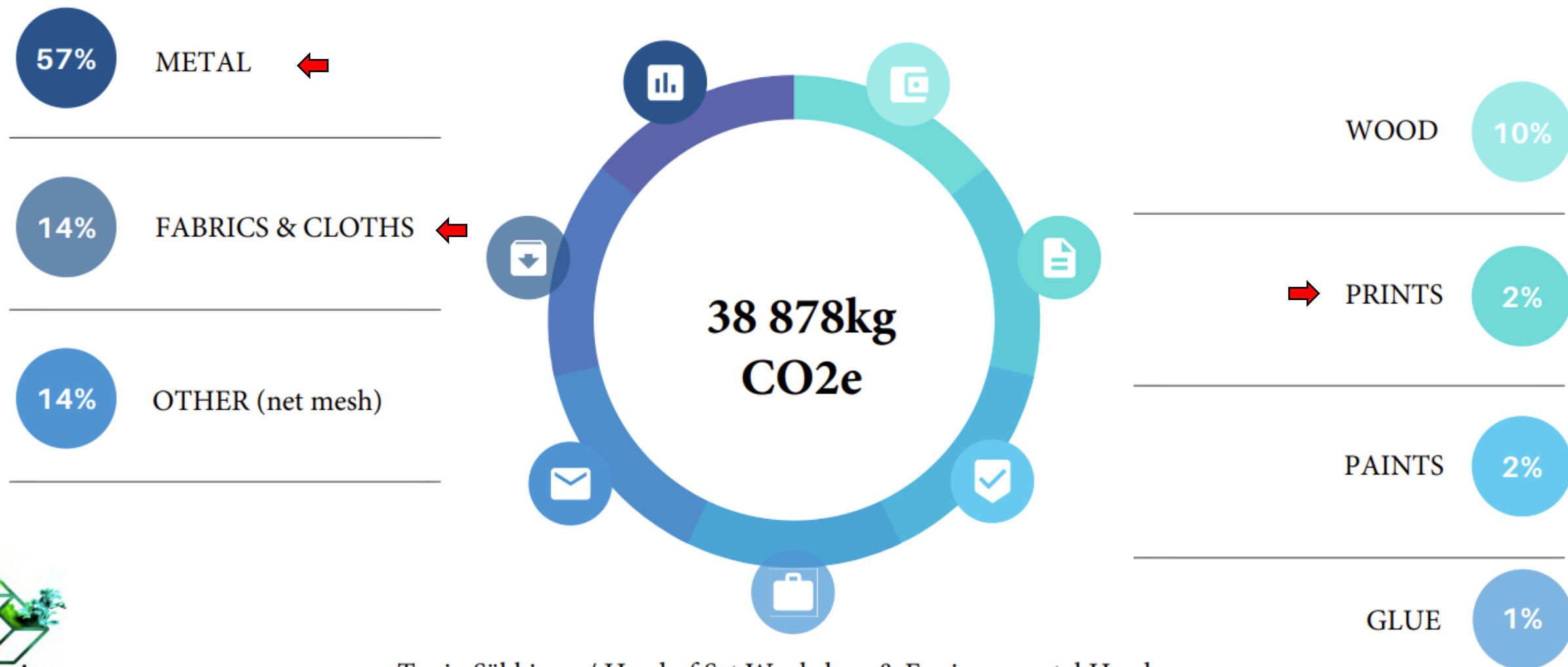


SWAN LAKE / BALLET

Estimated carbon footprint of set materials in CO₂e
17.11.2021



OOPPERA
BALETTI



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Some Emission Factors

- Planed pine batten **0.09 kg CO₂e/kg**
- Aluminium **7,2 kg CO₂e/kg**
- 2 mm PVC Dance Marley **39 kg CO₂e/kg**

- Printed polyester fabric **1,18 kg CO₂e/m²**
- Theatrical Muslin (cotton) **14,5 kg CO₂e/m²**
(about the same weight per m²)

Why Calculate Carbon Footprint?

This will help management and the environmental head to:

- Directing resources to effective actions
- Identifying the need for emission offsetting
- Monitoring the effectiveness of actions with a possible new calculation in the future

Future

- Green Producers Tool / carbon footprint calculations
- We have started to make **a roadmap for net zero**



The Roadmap's Sequence of Actions

1. Emission avoidance measures

- An emission avoidance measure is a measure that is not taken.
- If implemented, they may also reduce costs, i.e. they bring savings when the activity is not carried out.

2. Emission reduction measures

- Measures that aim to reduce emissions from an activity.
- Often require financial resources, i.e. an investment.

3. Offset payments



THANK YOU FOR YOUR INTEREST!

“No sensible decision can be made any longer without taking into account not only the world as it is, but the world as it will be.”

- Isaac Asimov

