



Reducing the environmental impact of public procurement for healthcare

Towards purchasing real impact



Reducing the environmental impact of public procurement for healthcare

- Ahmed Idhammad (CHU Marrakech): Carbon footprint in public procurement: Policy evaluation from a case study in the healthcare sector
- Anne Marie van den Berg (UMC Utrecht) & Lonneke de Graaff (CE Delft): Towards purchasing real impact

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1. Introduction UMC Utrecht



UMC Utrecht



A mission and strategic goals

The University Medical Center is a leading international academic medical center where knowledge of health, illness and care is generated, evaluated, shared and applied for the benefit of patients and society.



Social impact of our strategic programs

Connection with patients



CRS in UMC strategy

- Climate neutral in 2030
- Circular (no waste) in 2030
- In general: minimize our negative impact on environment and society for entire production chain



784.131 kg
recyclebaar afval



1.687.901 kg
niet-recyclebaar afval



48.716 ton CO₂ uitstoot

 **SUSTAINABLE DEVELOPMENT GOALS**



Procurement Department

- 27 employees
- 13 strategical/tactical buyers
- 6 operational employess
- 2 assortment coordinators
- 1 Advisor Sustainable procurement
- 5 teams: medical, facility, laboratory, operational and staff

450m spend per year



Introduction CE Delft

Independent research and consultancy since 1978

- Transport, energy and resources
- Know-how on economics, technology and policy issues

Characteristics

- 60 employees
- Not-for-profit
- Based in Delft, the Netherlands
- Clients:



Industries
(Small and medium size
enterprises, transport,
energy and trade
associations)



Governments
(European Commission,
European Parliament,
regional and local
governments)



NGOs

2. The why

Procurement contributions to achieving CSR Goals

Self assessment (2017): how are we performing as procurement department?

- ISO 20400:2017 → guideline sustainable procurement
- Gap analysis: where is potential for improvement?
- Main result: know where the real impact is!



Knowing about impact

- Which product groups have the most negative impact on the environment?
- Which product groups are at high risk for negative social impact?
- Which product groups are most relevant for achieving UMC sustainability goals?



What do you think??

Which product groups have the most negative impact on the environment?

<i>Product groups</i>
Medicines
Medical disposables
(Medical) equipment
Implants
Diagnostics
ICT
Food & beverages
Construction
Garments/textiles
Energy
Mobility
Waste collection & processing
Reusables (medical instruments)

3. The analysis & results

Approach

- Analysis of spend information
- Interviews + Data collection
- Desk research for social impact
- Calculation of the environmental impact



Quick scan analysis

- Life Cycle Analysis (LCA)
- Direct and indirect impacts
- The whole production chain (where possible)
- Software: SimaPro
- Databases: Ecoinvent, Agri-footprint, CE Generic data



Scope

- Information on the year 2017
- Focus on both facility and medical product groups
- Services and software excluded

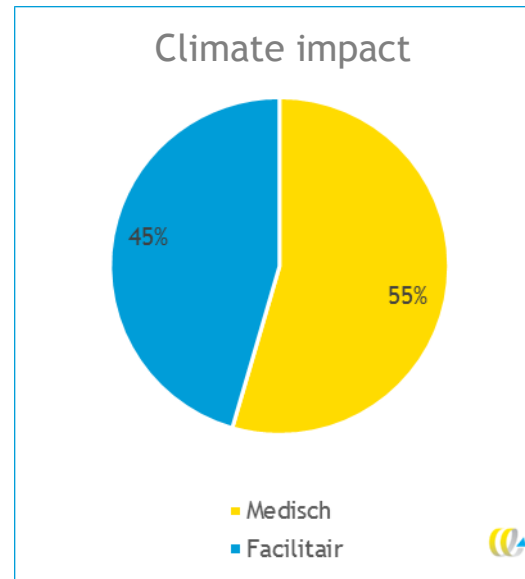
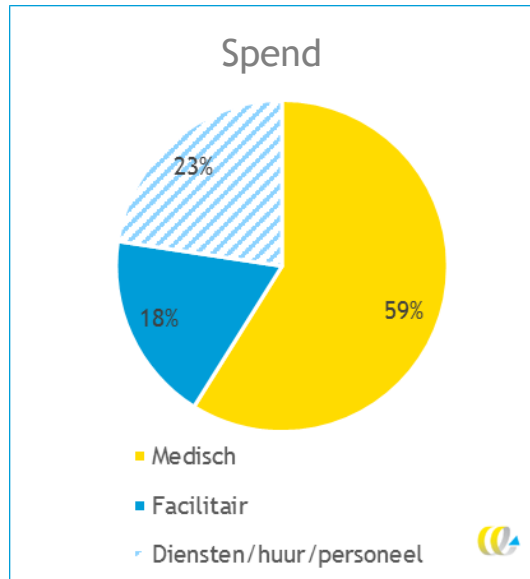
- **Facility:** calculation based on physical information (kWh, m³, gas, km, kg, etc.)

- **Medical:** CO₂ footprint based on company reports



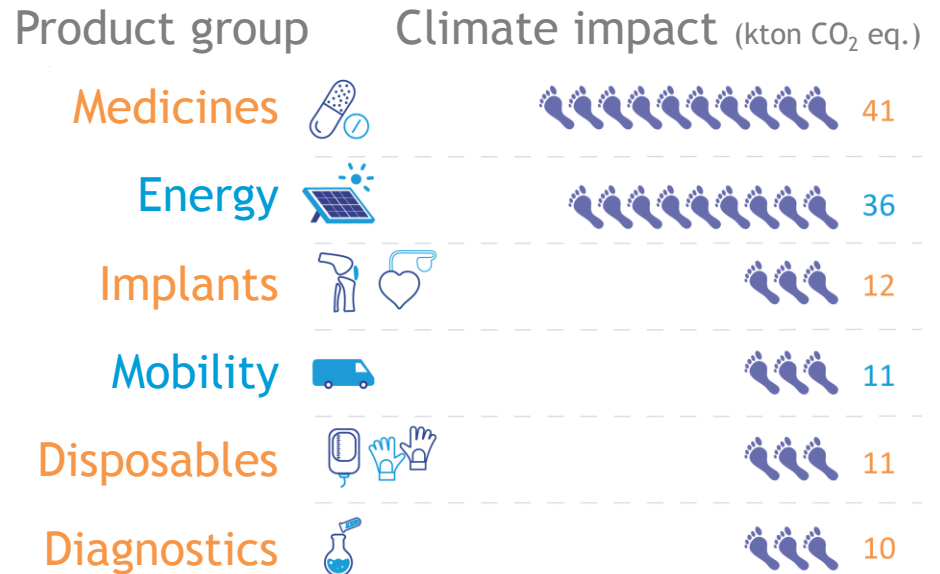
Spend analysis

- Medical groups form the largest expenditures
- Services: 23% of spend
- Facility groups: 18% of spending, but from 45% of climate impact

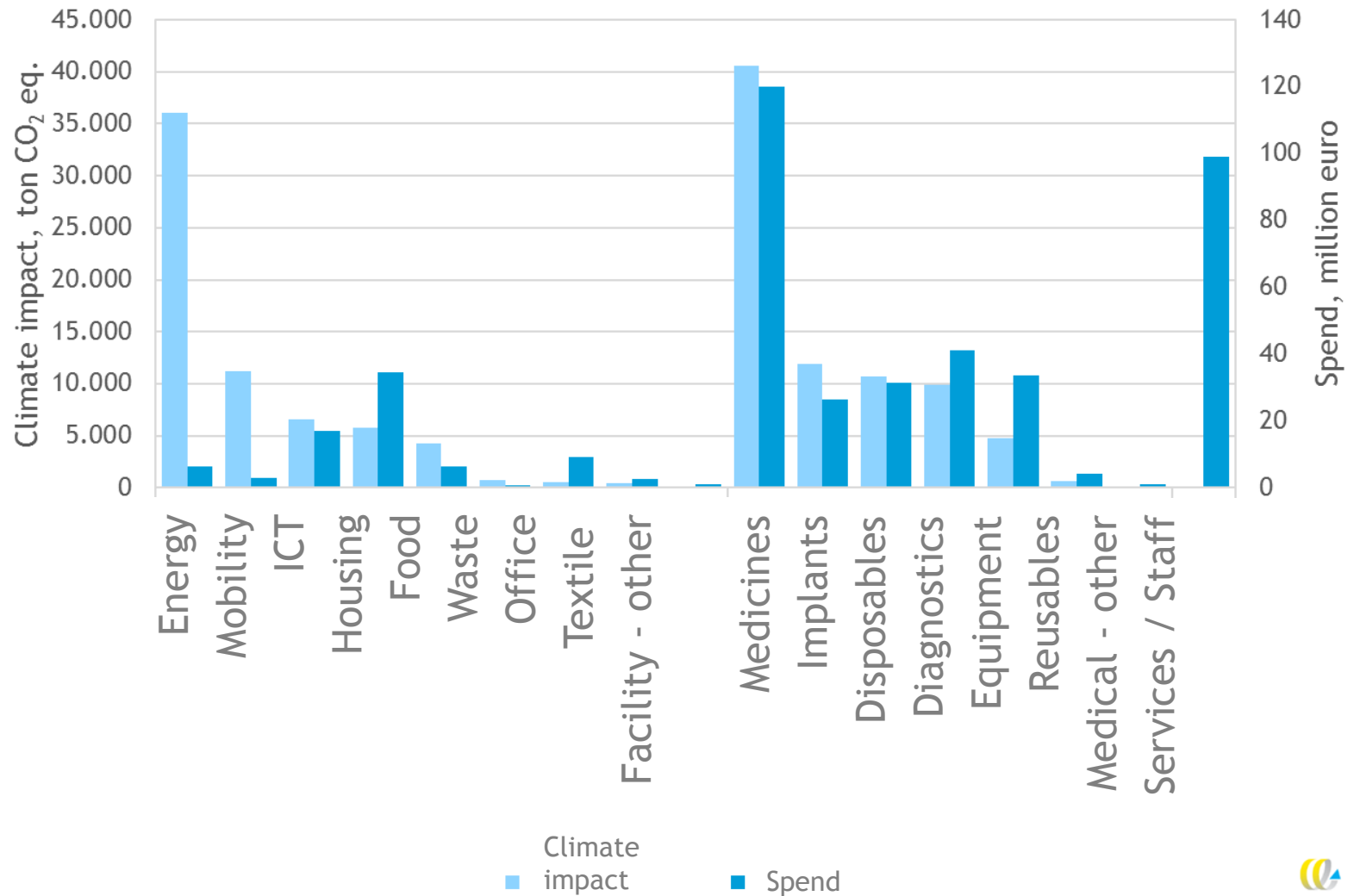


Climate impact

- 158 kiloton (kton) CO₂-eq. (= annual electricity use of 100,000 households)
- Medicines (41 kton, 28%)
- Energy (36 kton, 25%)

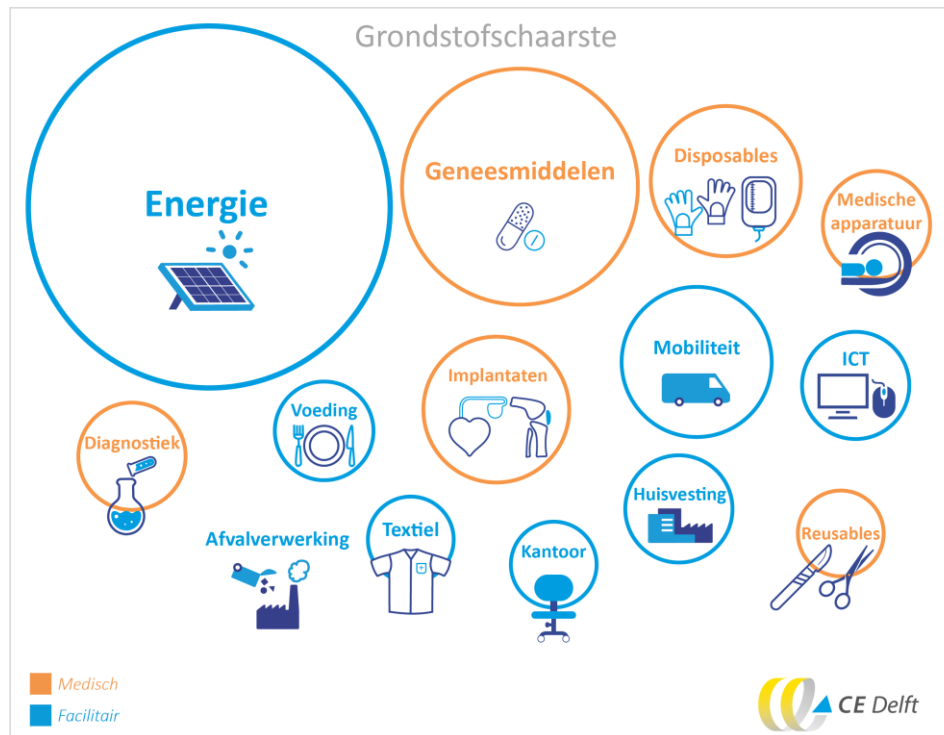


Spend and climate impact per product group



Circulair economy

- Resource depletion
- Highest impact: fossil depletion of energy use



Human health

Energy (39%)

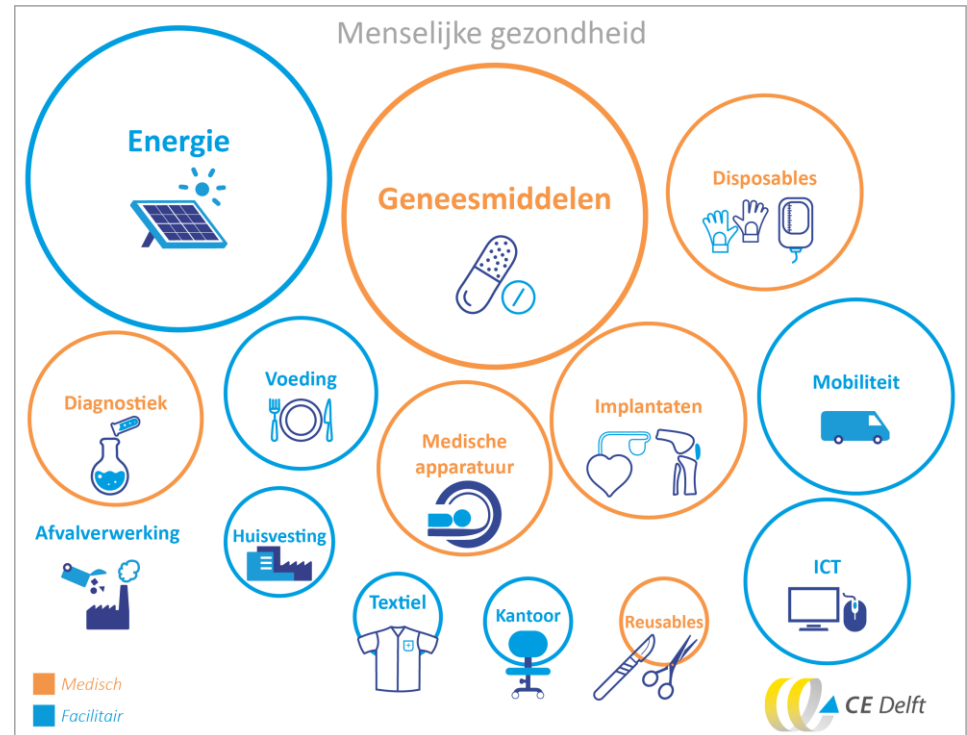
Medicines

Mobility (21%)

Implants

Disposables

ICT (17%)



Ecosystems

Energy (37%)

Medicines

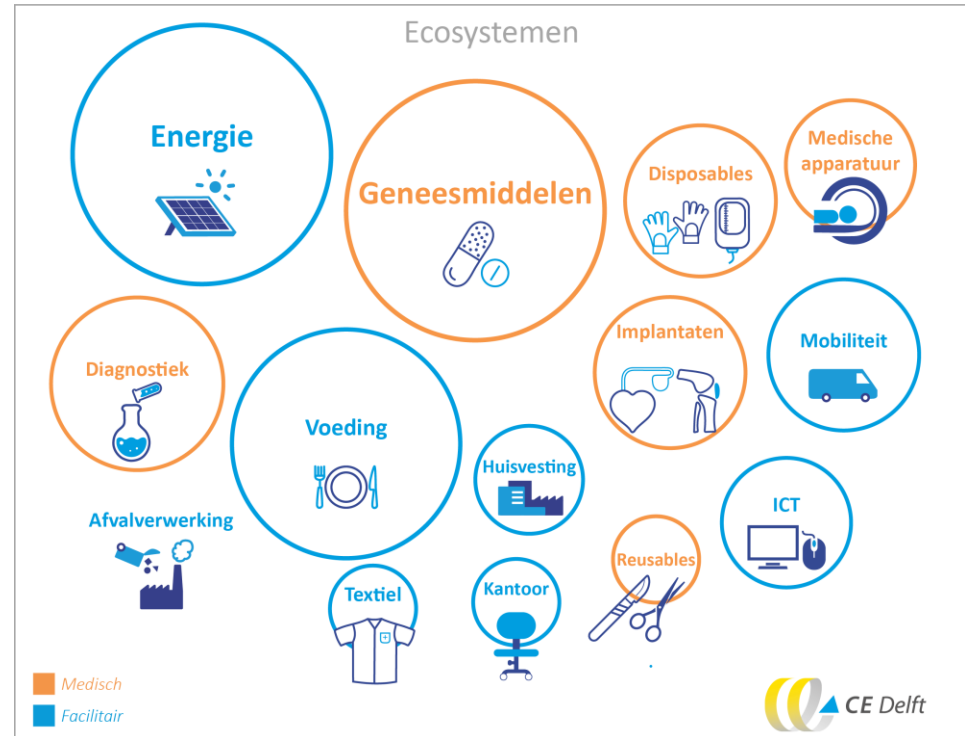
Food (30%)

Mobility (15%)

Implants

Disposables

Diagnostics



Social impact

Product groups: Medicines, ICT/equipment, Reusables, Textiles, Disposables

Risks residents: Health issues (pollution by toxic substances), contaminated environment, loss of land, loss of food, participation in clinical tests

Risks staff: Poor working conditions, unsafe work situations (inhaled dangerous substances, toxic substances, extremely high temperatures, loud noise, injuries), discrimination, forced labour, child labour, exploitation of women and migrants, low wages, overtime



What do we advise UMC to do?

- **Use less:** lengthen lifespan, ask for refurbished
- Ask your suppliers for their **vision on sustainability**
- Set **criteria** to your suppliers (energy, materials, transport) and select with award criteria



What to do for social impact?

- **Transparency:** Ask: where do the products come from?
- Ask for **certificates:** SA8000, Fair Labor Association (FLA), Business Social Compliance Initiative (BSCI)
- **Initiatives.** Work together for improvement
 - Responsible Mining Foundation and Synergy, 2018 (ICT)
 - Procurement of Medical Goods by Australian Companies and Government, 2017



What specific actions do we advise UMC?

- **Energy:**

- Generate your own renewable energy
- Purchase of equipment: energy efficient



- **Medicines**

- Work together with partners (NFU/NEVI-zorg): certificates, audits, unannounced checks)
- Discuss the issues with suppliers/health insurers
- Try to find partners for a ‘Sustainable Paracetamol’ case



Shift in focus is needed

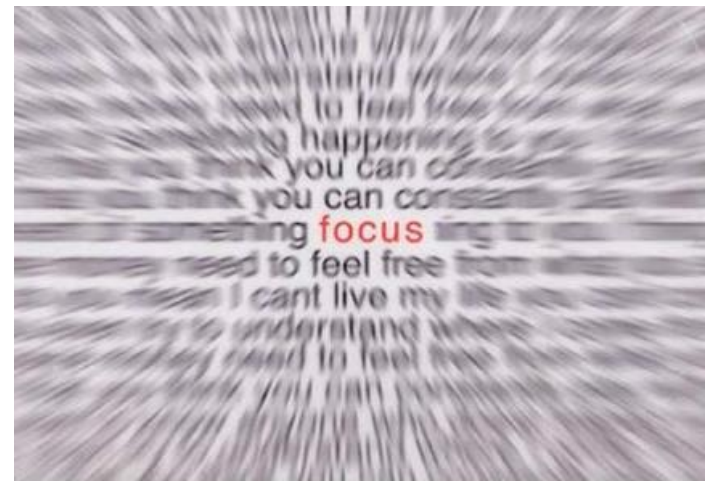
- More focus on **Medical** product groups!



4. Next steps

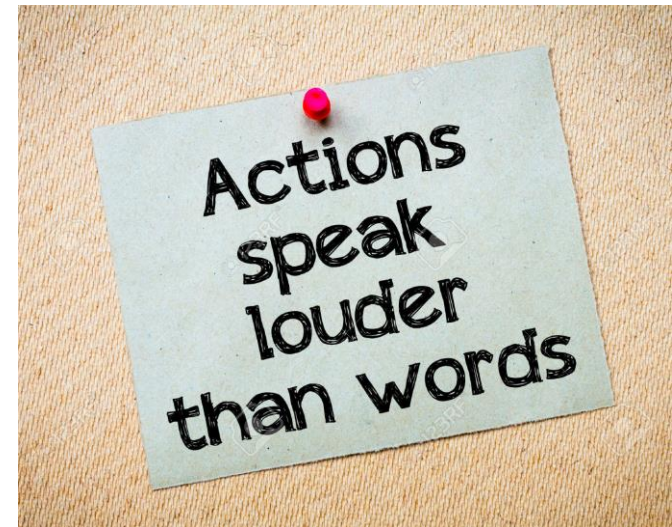
Tighten Sustainable procurement policy

- Prioritizing certain product groups
- Follow-up study
- Strategy per product group



Implementation policy into tenders

- Determine procurement criteria:
 - Per sustainability issue/situation
 - Per product group
- Determine award method:
 - Per product group
 - Per tender



Contract management

- Record the sustainable promises of suppliers in a more concrete way
- Monitoring impact better



Long term boosting sustainability

- Driving suppliers to innovate
- Collaboration to join forces in healthcare: we all buy pretty much the same products from the same suppliers!!



5. Lessons learned & recommendations

- Registering different data
- Appointing a dedicated internal project leader
- Being aware that it is a quick scan, and not the absolute truth



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