



Rijksdienst voor Ondernemend  
Nederland



## Market Engagement:

*Sustainability & Innovation IWR2021 Workspace Hardware*

**BRINC European Hub PPI Project**

**Johan Rodenhuis**

**Sustainability Advisor**

**Category ICT Workspace Dutch Central Government (IWR)**

Ministry of Economic Affairs and Climate Policy

*08 February 2023*



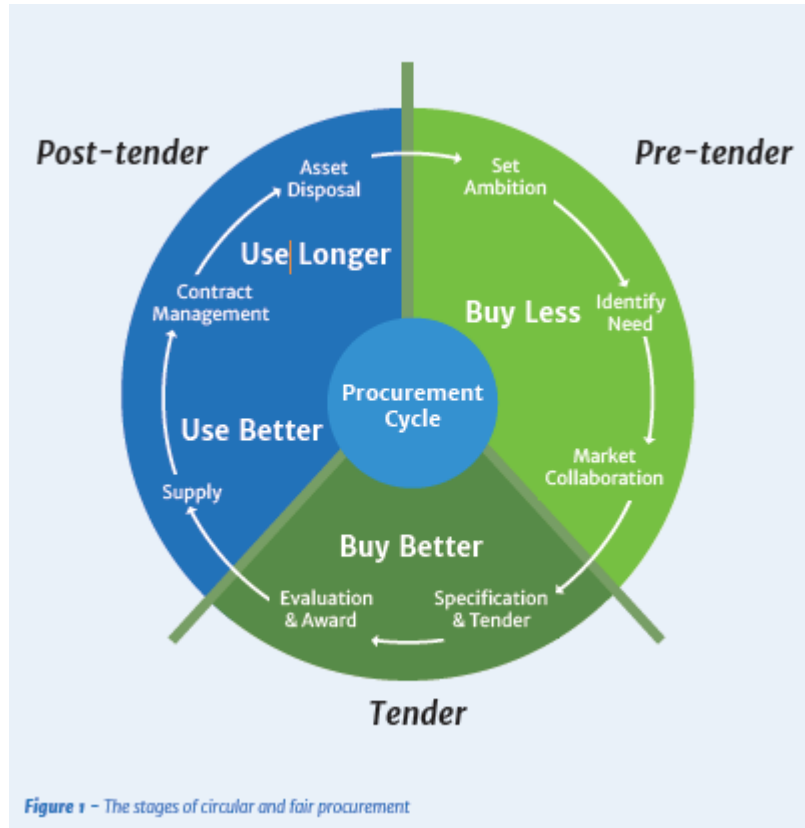
# Category IWR



- > Scope: ICT Workspace for government buildings/offices and employees of the Dutch Central Government (DCG);
- > 12 Government wide contracts:
  - Workspace hardware (laptops, tablets, smartphones, displays, location bound ICT , multifunctional printers, networkprinters and audiovisual products)
  - Telecom (telephony, VoIP, , sms gateway, inbound/outbound)
- > Participants: whole Dutch Central Government, High councils of state, Advisory councils, Courts, etc;
- > Spend 2021 approximately 163 M€/jaar;
- > IWR team: 8 persons.



# Sustainability ambitions (1)



Sustainability goals IWR:

- > Procurement with Impact
- > One of the forerunners in the EU
- > Actively sharing knowledge and collaborate inside and outside DCG/EU:
  - F.e. working groups within DCG
  - F.e. Circulair & Fair ICT Pact, ProCirc and Buyer Groups
- > Actively contribute to a “green Product and Services Catalogue” of ICT system integrators within DCG: only “green” products available in IWR contracts
- > Keep innovating: every procurement cycle more sustainable
  - Collaborating with rating / auditing organisations
  - Creating market engagement
  - Care for Participants
  - Focus on incremental and sustainable innovation



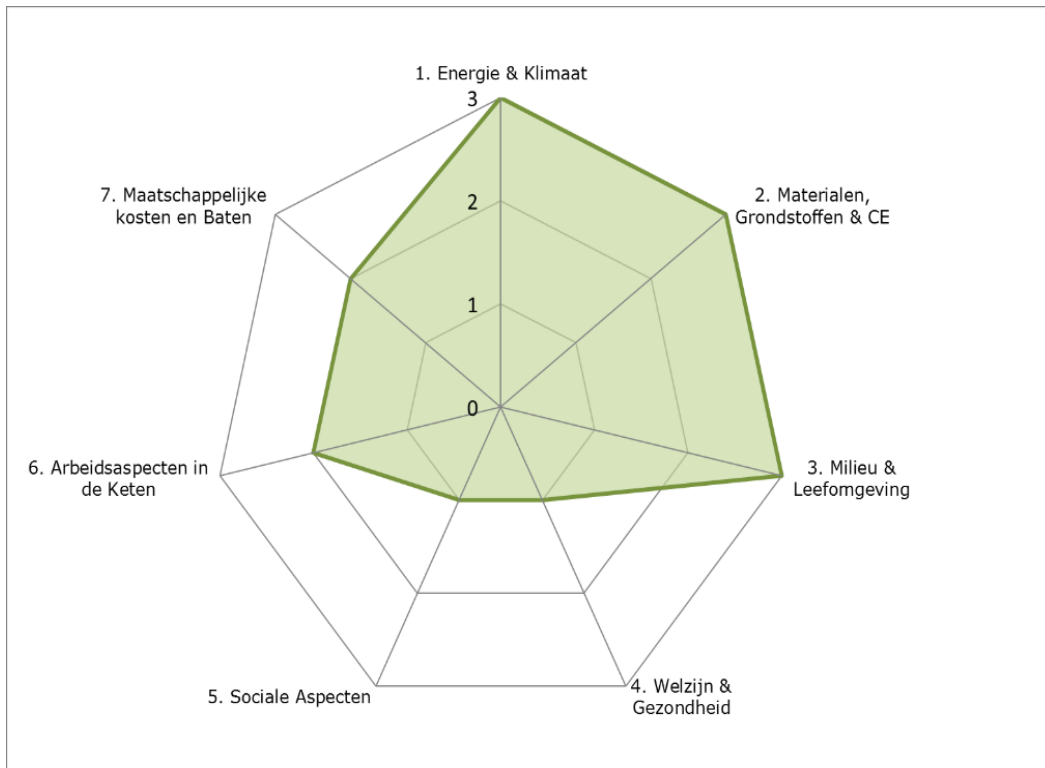
# Sustainability ambitions (2)

Requirements and award criteria on:

1. Energy and Climate
2. Materials, Natural Resources & Circular Economy
3. Living Environment
4. Well being & Health
5. Social aspects (social return)
6. Human rights & Ethics
7. Social Costs & Benefits

Best value for taxpayers money:

- › Multiple market consultations
- › 50% price / 50% quality (award criteria);
- › Quality: >87% award criteria on sustainability;





## Project IWR2021 Workspace Hardware

1. IWR2021|Workspace Hardware (WpHW)| Displays (incl. optional accessoires and services);
2. IWR2021|WpHW|Laptops & Vaste ICT werkplekken (incl. optional accessoires and services);
3. IWR2021|WpHW|Android devices & Accessoires (incl. optional services);
4. IWR2021|WpHW||iOS, iPadOS & MacOS devices (incl. optional accessoires and services);
5. IWR2021|WpHW|Workspace services (contract transcending):

Total estimated value IWR2021 WpHW approx. 475 M€.





# Market engagement

- Primary focus sustainability
- Market developments: ongoing (Q1 2020)
- Consulting market:
  - Q2 2020-Q1 2021
    - Deskresearch incl. rating / auditing organizations: April – June 2020
    - Suppliers: Juli – November 2020
  - Publishing concept strategy and concept requirements:
    - Anonimized answers suppliers: november 2020;
    - Procurement strategy: january 2021;
    - Concept requirements: february 2021.
- Tendering:
  - 4 Tenders Q2 - Q3 2021 (until august)
  - 1 Tender Q3 2021 – Q1-2022 (until january)
- Participants:
  - Meetings focused on sustainability from policy to requirements
  - Step by step
  - Sustainability as starting point

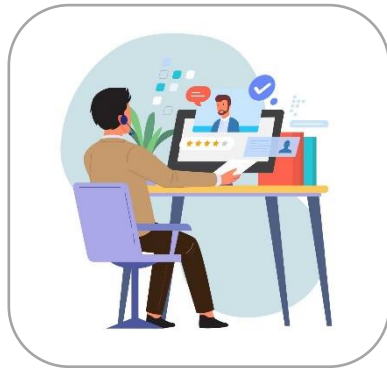






# How Category ICT Workspace (IWR) deals with Sustainability & CSR


## 2. CONTRACT AND VENDOR MANAGEMENT



## CATEGORY ICT WORKSPACE



## 3. CONTRACTUAL REQUIREMENTS:

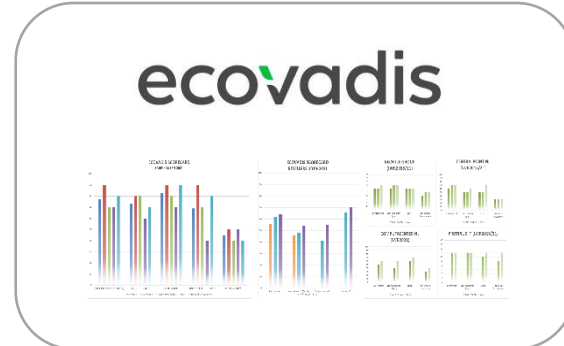
1. Minimum Ecovadis requirement resellers:
  - Contractor requires a minimum score of 'Good';
  - For IWR2021 Services: Advanced (working towards Outstanding) for contractor and sub-contractors.
2. Minimum Ecovadis requirement for vendors of products:
  - IWR2021 Laptops and Fat Clients: Advanced;
  - IWR2021 Displays: Partial (working towards Advanced);
  - IWR2021 Android & Accessoires: Advanced;
  - IWR2021 Services: Advanced (working towards Outstanding)
3. Monitoring by category IWR through EcoVadis tool.
4. Additional Product certification requirement: TCO certified 
5. Corrective action and reporting obligation.

## 4. REPORTING:

Category Owner, CPO and Customer Board



## 1. DASHBOARD



## ACTION PLAN





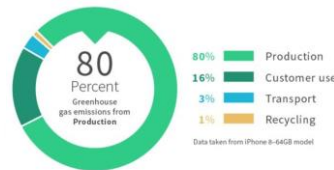
# 1. Energy & Climate

-  **Buy Less**
-  **Buy Better**
-  **Use Better**
-  **Use Longer**

- > Energy efficiency: Energy Star, 80Plus (Gold, Platinum en Titanium voor desktops en workstations), EU Energylabels;
- > Energymanagement: battery management (SoC) and State of Health (SoH);
- > CO2 footprint (LCA);
- > CO2 reduction aligned with Dutch climate agreement and DCG policy;
- > Most CO2 efficient mix for international transport;
- > 1 year after start framework agreement CO2 neutral vehicles or zero emission for smaller vehicles.
- > CO2 Compensation using **Fairtrade Climate Standard**
  - SDG: 3, 4, 6, 7, 8, 10, 12, 13, 14, 15 en 16



Greenhouse Gas Emissions of a Smartphone







**Buy Less**



**Buy Better**



**Use Better**



**Use Longer**

## 2. Circulair Economy

- > Availability spare-parts:
  - 5 years: Laptops, Fat Clients, Displays, iOS/OSX/iPadOS;
  - 4 years: Android & Accessoires.
- > Essential parts are repairable by specialists;
- > Refurbished, remanufactured or equal products are possible;
- > Minimum of 4 years software and security updates;
- > E-waste compensation:
  - TCO Certified Edge E-waste compensated for laptops, tablets and smartphones;
- > Lease:
  - minimum 80% products repurposed for a second/third life compliant to manufacturer guidelines and security policy DCG;
  - Remaining products: recycling/deassembly high quality natural resources;



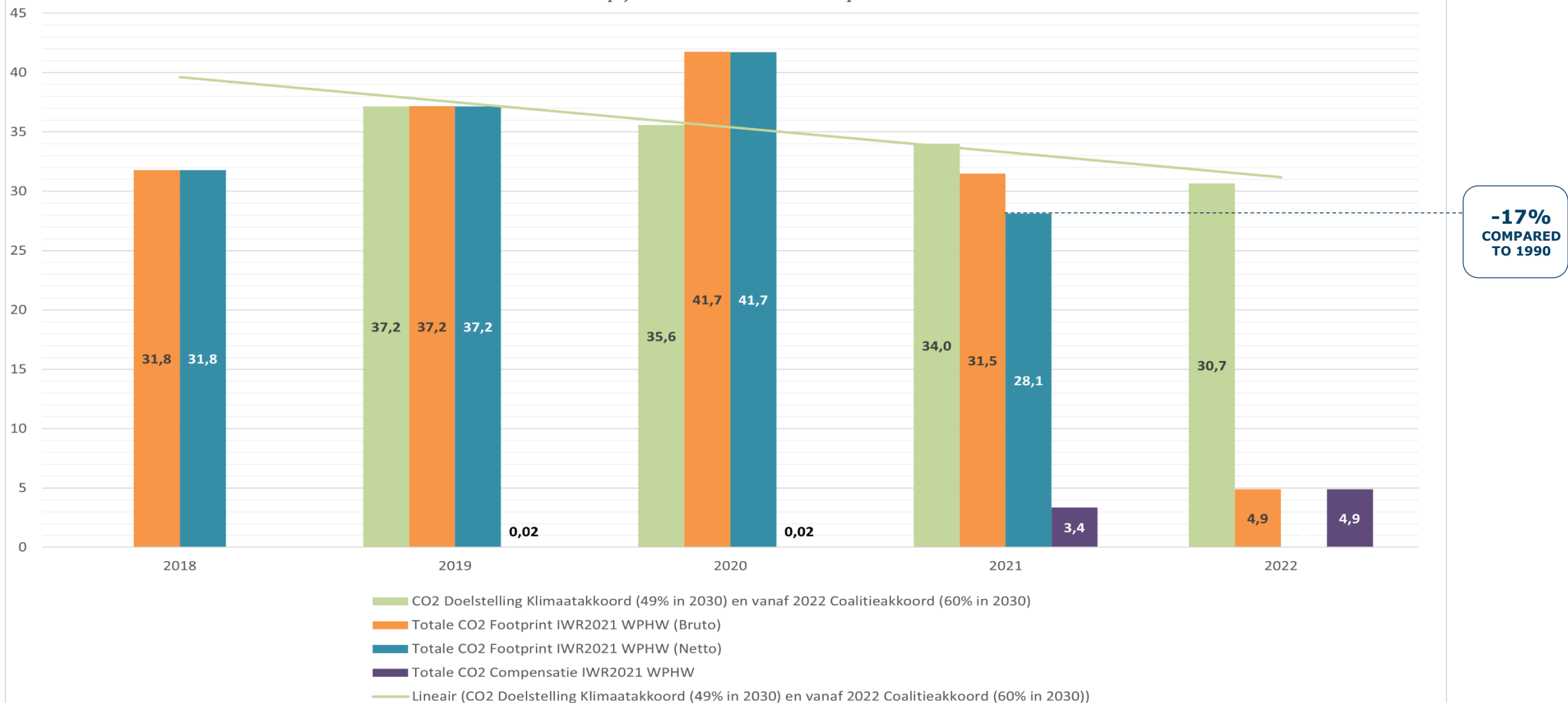
## **EXAMPLE DASHBOARD**

### IWR2021 WORKSPACE HARDWARE



## Totale Product Carbon Footprint (PCF) Werkplekhardware 2018-2022

op jaarbasis in Kton Co2-eq.



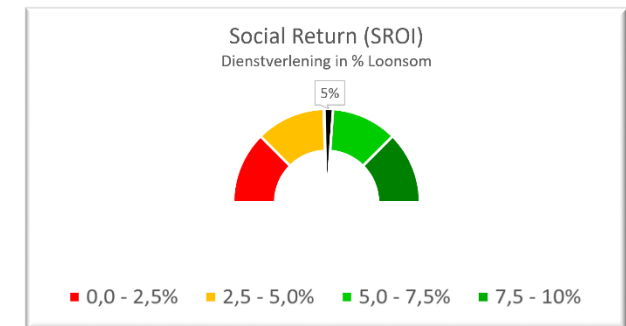
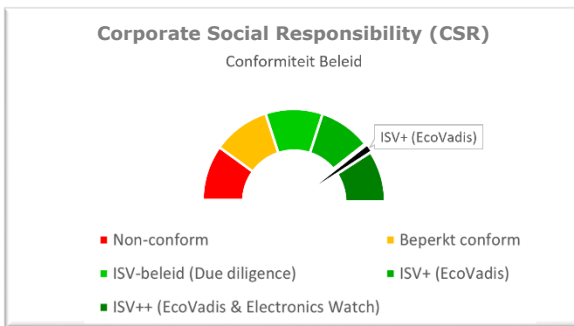
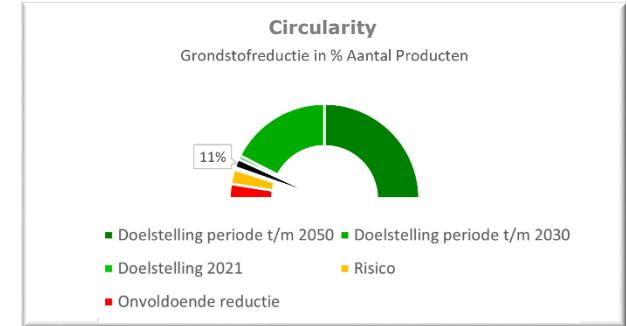
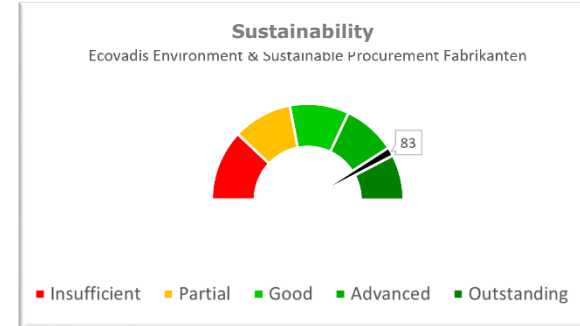
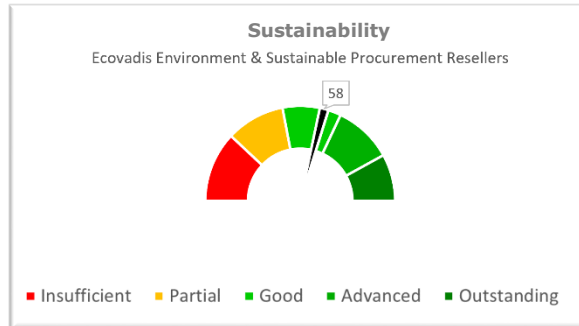
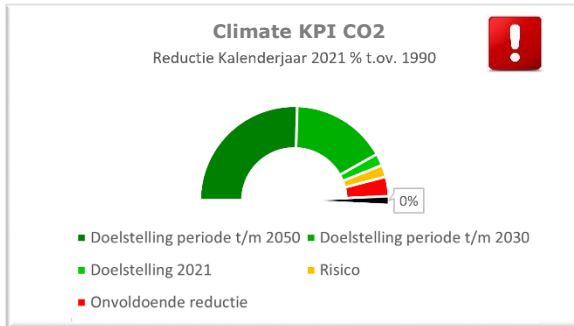
Based on Greenhouse Gas Protocol 'Product Life Cycle Accounting and Reporting Standard' (or equal) incl. raw materials, production, (downstream) transport, 4/5 year use phase and end-of-life.





# EXAMPLE DASHBOARD

## IWR2021 | Workspace Hardware | Laptops en Clients



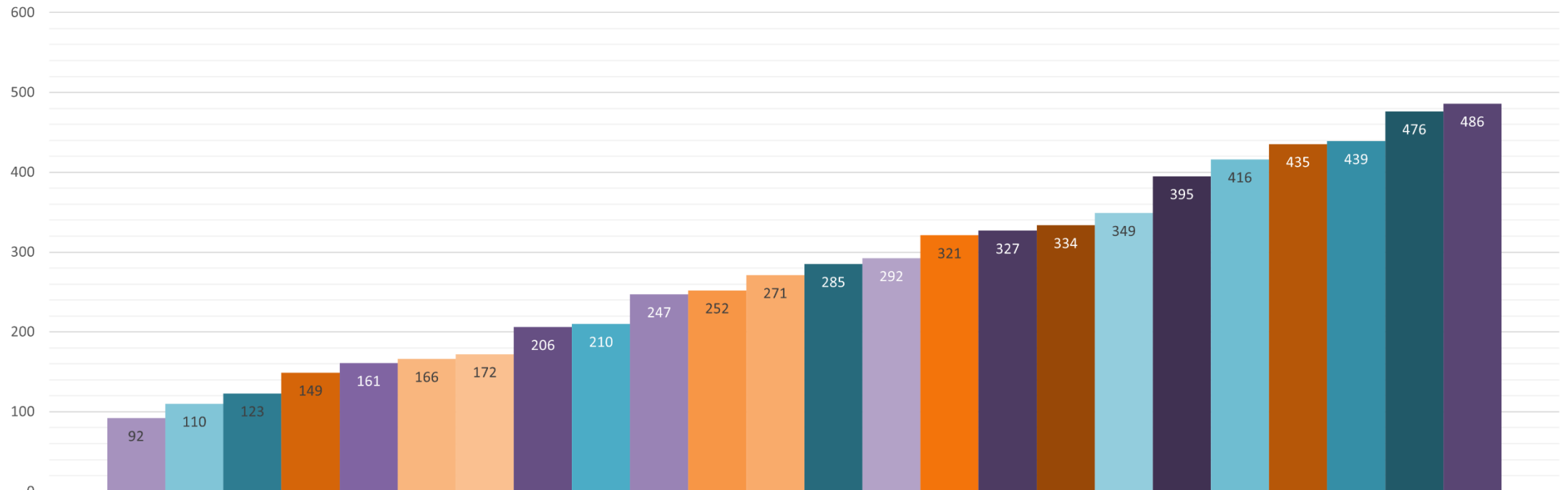


## EXAMPLE DETAILS

### IWR2021 | Workspace Hardware | Laptops & Clients

#### Average Product Carbon Footprint (PCF)

in kg Co2-eq. based on 4 year lifecycle



Based on Greenhouse Gas Protocol 'Product Life Cycle Accounting and Reporting Standard' (or equal) incl. resources, production, (downstream) transport, use phase and end-of-life.

- iPad Air 10,9"
- iPad Pro 11"
- Surface Pro X 13"
- Surface Pro 8 13"
- Macbook Air 13" inch (M1 2020)
- iPad Pro 12.9"
- Surface Laptop 13"
- Surface Laptop 15"
- Laptops Windows 12" en 13"
- Macbook Pro 13" inch (M1 2020)
- Macbook Pro 14" inch (M1 2021)
- Laptops Windows 14"
- Macbook Pro 16" inch (M1 2021)
- Macbook Pro 16" inch (M1 Max 2021)
- Laptops Windows 12" en 13"
- Chromebook 13"
- Laptops Windows 15"
- Macbook Pro 16" inch (M1 Max 2021)
- Macbook Pro 16" inch (M1 Max 2021)
- Surface Book 13"
- Chromebook 14" en 15"
- Surface Book 15"
- Fat Client (ex. display)
- iMac 24" (M1 8-core GPU)
- Laptops Windows 17"



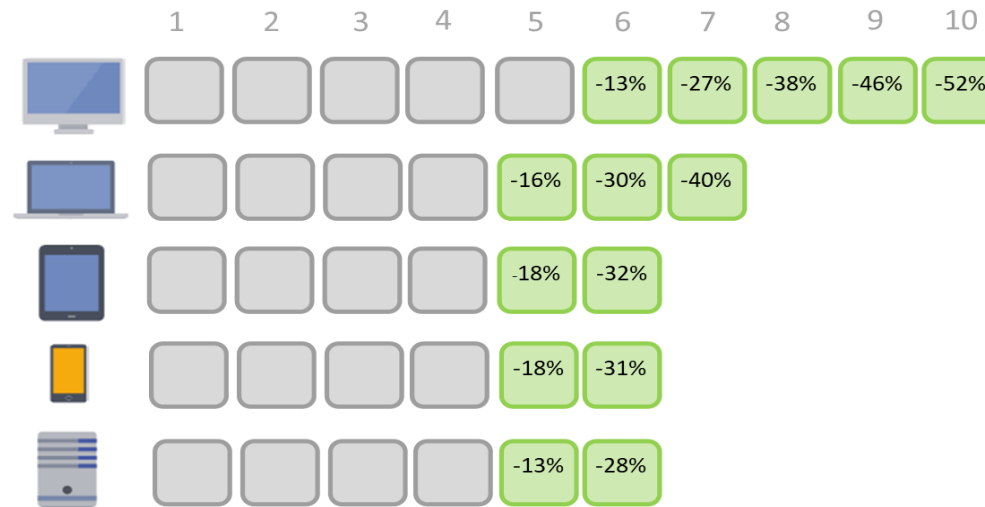
# Recommendations

## Product Portfolio Workspace hardware

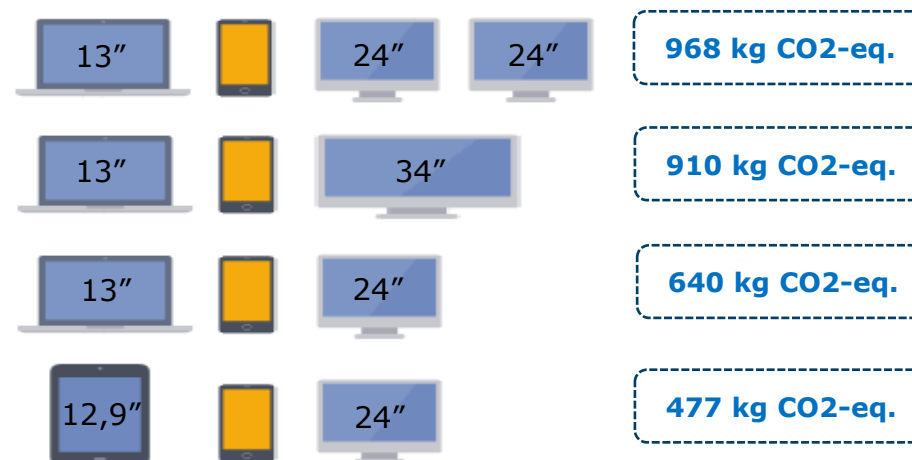
1. Consider Mobile Only concepts, these contribute to a significant lower CO2 footprint vs. thin/fat clients;
2. Consider using CO2 footprints of products as strategic indication to (re)evaluate and reconsider the product portfolio;
3. Investigate possibilities for BYOD and/or COPE, these concepts contribute to a significant reduction of footprint and TCO (through deduplication >40% reduction CO2/raw materials and with BYOD cost reduction);
4. Investigate possibilities to reduce the number of workspaces with two displays and ultra wide displays (80/20 rule), reuse excess displays in other parts of the government or make them available for home use;
5. Maximize ifecycles for maximum CO2 reduction, lower usage of virgin raw materials, cost savings and risk mitigation of human rights and labour violations :
  - a. Smartphones and tablets 5-6 years;
  - b. Laptops 5-7 years;
  - c. Displays 10 years (or only by defect);

More info: [Circularity in practice: How to manage notebook computers responsibly - TCO Certified](#)

### CO2 REDUCTION MAXIMALISATION LIFECYCLE



### EXAMPLE CO2 EFFECT PRODUCT PORTFOLIO



Based on Greenhouse Gas Protocol 'Product Life Cycle Accounting and Reporting Standard' (or equal) incl. raw materials, production, (downstream) transport, 4 + 5 year use phase and end-of-life in combination with IWR2021 Footprint data analysis and extrapolation. Products mentioned are based on a standard Windows-OS laptop (i5 or equal processor, 8GB RAM and 256GB SSD), 6,1" smartphone with 128GB storage, tablet with 256GB storage and standard office display(s) based on 0,7 WPF. For use of keyboard add 16kg CO2-eq and mouse add 6kg CO2-eq based on 0,7 WPF.



