

# Clean Med 2013 – Oxford Tuesday 17<sup>th</sup> September 2013 Session 1b

Green Public Procurement for Medical Devices













### Welcome

- David Wathey
  - Head of Sustainable Procurement, Department of Health, UK Government
- Eva Dalenstam
  - EU GPP medical devices Project Leader, Swedish Environmental Management Council
- Hans van der Wel
  - Director of Ecodesign and Sustainability, Philips Healthcare
- James Vetro
  - Principal Engineer, Global Environmental Technologies, GE Healthcare
- Charlotta Nelsson
  - Senior physician at the department of clinical physiology, Central hospital in Karlstad, Sweden
- Volker Welter
  - Senior Procurement Advisor at the UNDP



THE EU GPP CRITERIA FOR INNOVATIVE MEDICAL DEVICES
OXFORD, SEPT 17, 2013
EVA DALENSTAM, EVA@MSR.SE



### EU GPP CRITERIA – GREEN PUBLIC PROCUREMENT

#### What is GPP?

 "Procurement of goods, services and works with a reduced environmental impact throughout their life cycle"

- Why does it matter?
  - 2 trillion euros annually
- The EU GPP criteria are:
  - translated into all official languages
  - free to use directly in tendering documents







### WHY EU GPP CRITERIA FOR MEDICAL DEVICES?

- Public procurement is a large share of the European expenditure of health services:
  - top 14 most procured product categories
- Accelerating energy consumption:
  - top 5 of most energy consuming products in Europe



#### THE EU GPP CRITERIA FOR MEDICAL DEVICES

- Started in 2011
- Led by SEMCo
- Scope:
  - Phase I: health care EEE
  - Phase II: consumables & pharmaceuticals
- 3 hospitals already using them
- Will be published end of 2013





#### **CRITERIA FOR 20 PRODUCT GROUPS:**

Anaesthesia equipment

CT

Dialysis equipment

Diathermy equipment

Disinfectors

ECG equipment

**Endoscopy equipment** 

Incubators for babies

Infusion pumps

Intensive care equipment

Laser instruments for surgery

Medical freezers

Medical lighting

Monitoring equipment

**MRI** 

Patient warming systems

**Sterilizers** 

Ultrasound

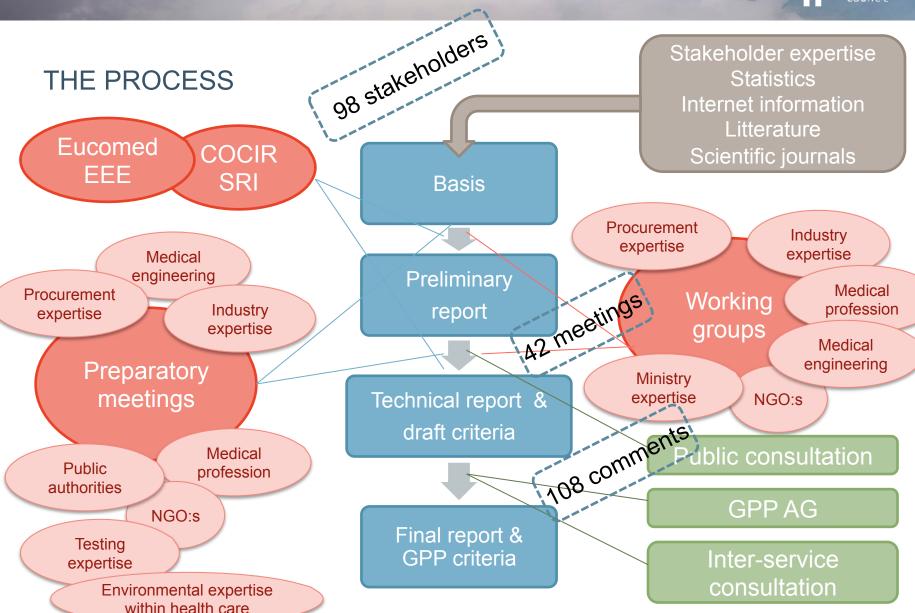
Ventilators

X-ray (incl. mammography)

Can be found at

www.msr.se/criteria-work/medtech





Sustainable procurement



#### ENVIRONMENTAL ASPECTS ADDRESSED IN THE CRITERIA

### Climate change

Energy usage during the use phase

- Energy performance criteria
- Low power mode criteria

Use of refrigerants

Low GWP criteria

Gas usage

Low flow equipment criteria

Water usage during the use phase

**Water scarcity** 

Water efficiency criteria

All equipment

Sterilizers, disinfectors, CT, ECG, MRI, US

Medical freezers

Anaesthesia equipment

Dialysis, disinfectors



#### CONT. ENVIRONMENTAL ASPECTS

- Content of hazardous chemicals
  - Chemicals management systems
  - Equipment with low levels of hazardous chemicals
- Example of targeted chemicals:
  - BPA



#### 3. Draft EU GPP Criteria for health care EEE

The below proposed Draft EU GPP criteria for health care EEE are based on data and information in the Technical Background Report.

#### 3.1 Draft EU GPP criteria for health care EEE

#### Core criteria

#### SUBJECT MATTER

Purchase of electrical and electronic equipment used in the health care sector with reduced environmental impact.

#### SELECTION CRITERIA

#### 1. Chemicals management system (General criteria for all equipment)

The tenderer shall have a chemicals management system in place with declinated resources the necessary exp

tenderer is aw 8. Energy performance of health care EEE

have been Incl Points will be awarded for the equipment based on how low the reported daily energy usage is, E under Article 5 (kWh)/day), according to the table and the test conditions below. Please fill in the table for the relevant the Candidate medical equipment: (the lower daily Energy usage, the more points will be awarded).

- that In Definitions of modes are according to Appendix 1. Verification description can be viewed below the table. Energy performance criteria for CT, haemodialysis equipment, MRI, medical sterilizers and disinfectors can be found in separate criteria.
- Ist by For incubators and medical freezers, points will be awarded for the equipment based on how low the a systi reported daily energy usage per volume is, E (kWh/day and m³).

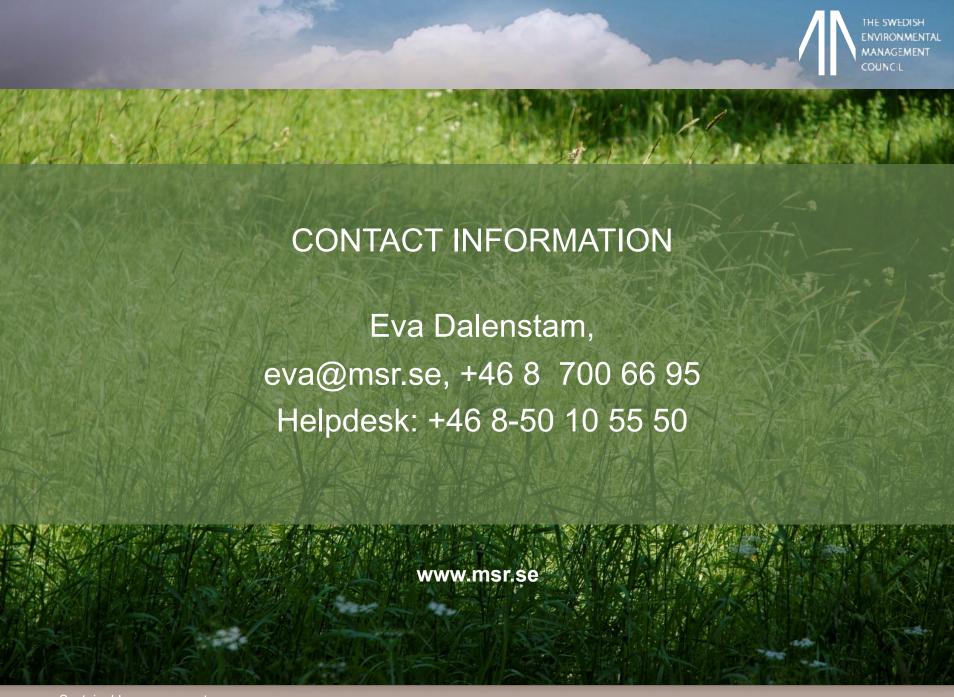
  Candii Contracting authorities will have to indicate in the contract notice and tender documents how many points will be awarded for each award criterion.

analys Verification: Te and describe ti (time, personn can be carried	Equipment	Mode	Customised scenario Stated by procurer	Pre-determined use scenario Guidance	Energy in use phase Stated by tenderer	The Energy usage (E) calculation:
	Active Respiratory Gas Humidifier	Active  Definitions of modes according to appendix 1.	T <sub>1</sub> = 24 hrs.  T=time, number of hours in the current mode per day	T <sub>1</sub> =24  Recommended use scenario.	P= power (kW), Power measurements according to test conditions in appendix12	(T <sub>1</sub> *P <sub>1</sub> ) = E (kWh) per day
	Bed side monitoring equipment	Active	T <sub>1</sub> = 24 hrs.	T <sub>1</sub> = 24  Recommended use	P <sub>1</sub> P= power (kW), Power	(T <sub>1</sub> *P <sub>1</sub> )= E (kWh) per day
2		of modes according to appendix 1.	hours in the current mode per day	scenario.	measurements according to test conditions in appendix 14.	
<sup>2</sup> For further guida www.cocir.org, or Draft for GPP I	ECG (Electro- cardio- graphic) equipment (diagnostic)	Active	Tı	T <sub>1</sub> = 2	P <sub>1</sub>	$(T_1*P_1) + (T_2*P_2) + (T_3*P_3) = E (kWh)$ per day
		Standby (for those which have	T <sub>2</sub>	T <sub>2</sub> = 2	P <sub>2</sub>	



### READY FOR USE IN DECEMBER 2013

- At ec.europa.eu/environment/ gpp/
- Core and comprehensive
- Selection criteria, technical specifications, award criteria
- Energy criteria:
  - Pre-determined use scenarios available
  - Can easily be inserted in an LCC
- Up-coming:
  - LCC-tool
  - Phase II
- UN IATT









# Sustainable Competence in Advancing Healthcare

### **CLEANMED 2013**

**GREEN PUBLIC PROCUREMENT FOR MEDICAL DEVICES** 

### COCIR ACTIVITIES TOWARDS GREENER HEALTHCARE





# COCIR COMPANIES WORKING TOWARDS GREENER HEALTHCARE

#### **COCIR SRI\***

COCIR members committed with the EU Commission to improve environmental performance of medical devices.

Ultrasound, MR and CT have been analyzed from 2010 to 2012.

Figures, results, goals and achievements are reported yearly with the SRI Status Report

\* SRI: Self Regulatory Initiative

#### **MANAGING SUBSTANCES**

COCIR members have been working to implement a data management tool for regulated substances in medical devices since 2008.

BOMCheck, a web-based tool, is developed to allow manufacturers to collect supplier substance information.

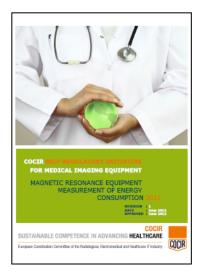
Well-structured systems enable compliance with substance legislation and accuracy of declarations.

### MEASURING THE ENERGY CONSUMPTION

Standard methodologies for measuring MRI and CT energy consumption are available on the COCIR website for download.

Thanks to COCIR SRI it is now possible:

- To compare different equipment
- To calculate realistic running costs
- To save energy through proper use of the technology



COCIR Publications
Measurement standards
Available at www.cocir.org

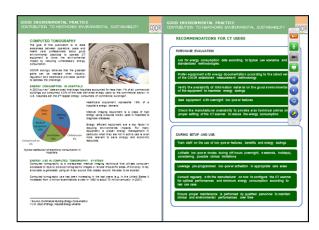
BOMcheck .net



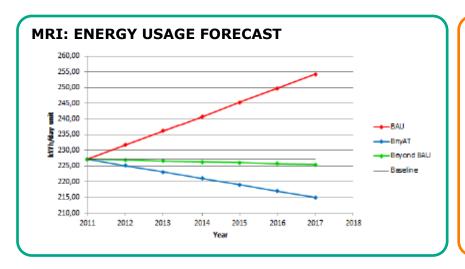
# COCIR COMPANIES WORKING TOWARDS GREENER HEALTHCARE

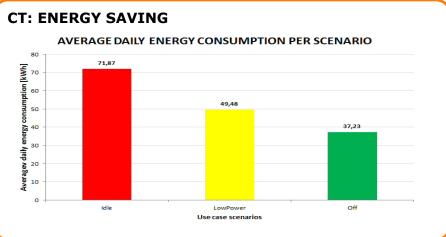
#### **SAVING ENERGY**

- •Customer requirements for improved clinical performance are pushing energy demands higher
- •Greatest potential for savings in non-scanning modes
- •COCIR Members are working to increase energy efficiency:
  - ✓ Increasing scan speed
  - ✓ Switch-off of modules when not in use
  - ✓ Implementing low energy modes
- •Proper usage can save between 30% and 50% of daily energy consumption. For CT , 11.200 kWh of electricity (on average) can be saved per equipment per year, equivalent to around €1,200.



COCIR Brochure
Computed Tomography Good Environmental practice

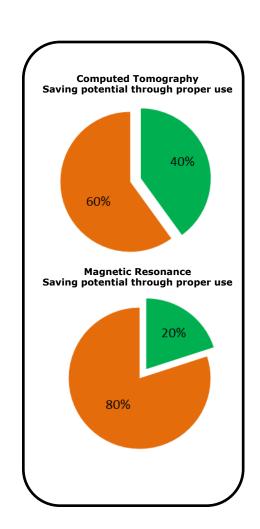






# COCIR COMPANIES WORKING TOWARDS GREENER HEALTHCARE

- COCIR Companies believe that proactivity is the best approach to achieve ambitious results in environmentally conscious Healthcare.
- Energy efficiency can be improved by manufacturers but the highest potential lies in usage patterns.
- Saving energy in medical imaging equipment is possible mostly in non-scanning modes. Therefore partnership between manufacturers and user is the key for the reduction of energy consumption.
- Partnering with suppliers up and down the supply chain through the use of structured tools and systems are enablers toward the management of substances.
- Green Public Procurement can promote greener technologies with the use of consistent measurement methodologies, resulting in comparable evaluations.









# Sustainable Competence in Advancing Healthcare

### THANK YOU

Information on COCIR SRI and activities on ecodesign of medical imaging equipment at

www.cocir.org



CleanMed Europe 17.9.2013

Charlotta Nelsson Senior Physician

Swedish Doctors for the Environment (LfM)







- Previously: Considering function, medical performance and patient safety
- No criteria for sustainable procurement to use
- Now: Comparable medical equipment with similar performance. Procurement considering sustainability
- A chance to use and test the GPP criteria





- Current procurement in the County Council of Värmland, Sweden:
  - Disinfectors: Using the draft GPP criteria model to calculate energy consumption.
  - Defined user scenario in the specification, the suppliers have to provide the requested information
  - Seems to work, awaiting final results
- Ungoing construction of a new hospital building (including many operation theatres), in need of several medical equipments:
  - In the procurement only equipment showing low energy consumption will be requested, with plans to use the GPP criteria for medical devices



Swedish Doctors for the Environment (LfM) www.lakareformiljon.se charlotta.nelsson@liv.se



# UN Initiative on Greening Procurement in the Health Sector

Volker Welter, Senior Procurement Advisor, UNDP, Nordic Office, Copenhagen



# UN Informal Interagency Task Team on Sustainable Procurement in the Health Sector













### Vision of the Task Team

- In line with the ethical standard "do no harm" we aspire to lead by example
- In the health sector, procurement is the most important contributor to GHG emissions, ecotoxicity and resource depletion
- Therefore, we aim to provide solutions to 'green' the procurement of health related products and services

### The opportunity for joint UN action

- UN agencies (UNDP, WHO, UNFPA, UNICEF, UNOPS)
   procurement for the health sector represents a
   sizable part of the market (3 billion USD in 2012)
- The UN has a critical mass of procurement in some segments of the market that could help orienting the market towards more sustainable directions
- Integrating sustainable procurement systems into the mandates of global health donors; setting targets and timelines for an overall reduction in the UN footprint; and ensuring the principle of doing no harm are some of the ways in which that goal can be achieved

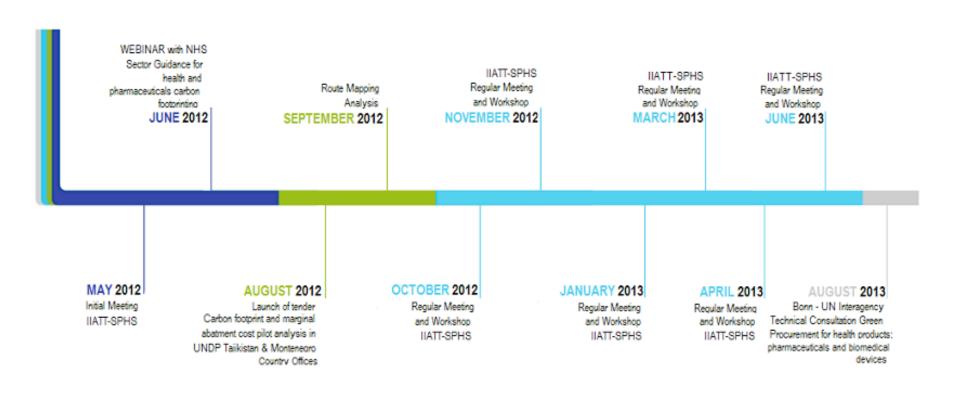
### Some of the main joint initiatives of the Task Team

- Guidelines for green procurement of health products and services – the UN Agencies are collaborating to formulate guidelines within the framework of the WHO guideline development handbook
- Best practices for carbon foot-printing and integration of environmental criteria in procurement practices – moving towards a methodology for the environmental auditing of suppliers
- Substitution of hazardous chemicals in procurement practices – integration of lists on hazardous chemicals for eventual substitution in the technical specifications for suppliers

### Timeline of the activities of the Task Team

'Since May 2012, a collaboration between UNDP and other UN agencies in Copenhagen has resulted in the formation of the Informal Interagency Task Team for Sustainable Procurement in the Health Sector (IIATT-SPHS). From this point on, several meetings were held and steps taken towards the aim of greening the health sector.

Below is the timeline that shows the progress made so far'.



# Outcomes of the UN Initiative of Greening Procurement in the Health Sector,

Bonn – Technical Consultation, 29th-30th August 2013

#### 4 areas of consensus were reached in the consultation in Bonn:

- To go with the WHO process it has the benefit of some flexibility
- Issue a public statement from all UN Agencies that states their continuing commitment to the initiative
- Very pragmatic approach for the guidelines first collect the different existing substitution lists (HCWH, KP, Chem Sec and so forth) and then co-relate what products already overlap in these lists; and then relate the list to the top 20 products procured collectively by the UN Agencies (by \$ value and volume)
- Parallel to guideline development implement other urgent measures (such as carbon foot-printing of freight and sustainable methodologies for the disposal of hazardous medical waste)

### Timeline of future actions

### **Development of a Joint Programming Proposal**

- UN initiative to integrate activities related to the greening of procurement in the health sector
  - Development of guidelines that can incorporate a classification/ rating system of pharmaceuticals based on
    - Green House Gas emissions
    - Eco-toxicity
    - Resource depletion
- After the scoping phase there is a 1-2 years timeframe for guideline development

### Concluding remarks

### Some of the outcomes envisioned are:

- Influence the normative level through guideline development
- Apply a market shaping approach by the formulation of tender processes
- Develop a consensus for monitoring and auditing compliance to sustainability criteria of suppliers and users of health products and services



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**Questions and Discussion** 













