




Sustainable Competence
in Advancing Healthcare



COCIR **SELF-REGULATORY INITIATIVE** FOR MEDICAL IMAGING EQUIPMENT

CT ECODESIGN GOAL




**COCIR SELF-REGULATORY INITIATIVE
FOR MEDICAL IMAGING EQUIPMENT**

COMPUTER TOMOGRAPHY REPORT

12 March 2013 - Draft for discussion

SUSTAINABLE COMPETENCE IN ADVANCING **HEALTHCARE**

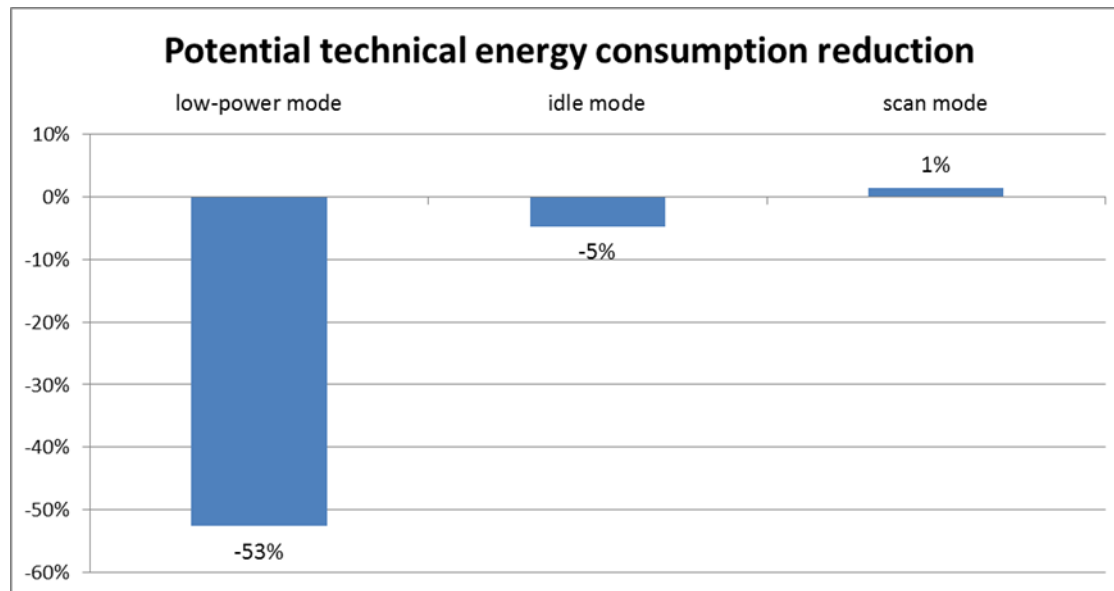
European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry





IMPROVEMENT POTENTIAL

- The study on improvement potential shows limited improvement potential except low-power mode.
- LowPower mode accounts for just a 24,5% of the total daily energy consumption and therefore the 53% improvement even if possible, will end up in a 13% reduction.



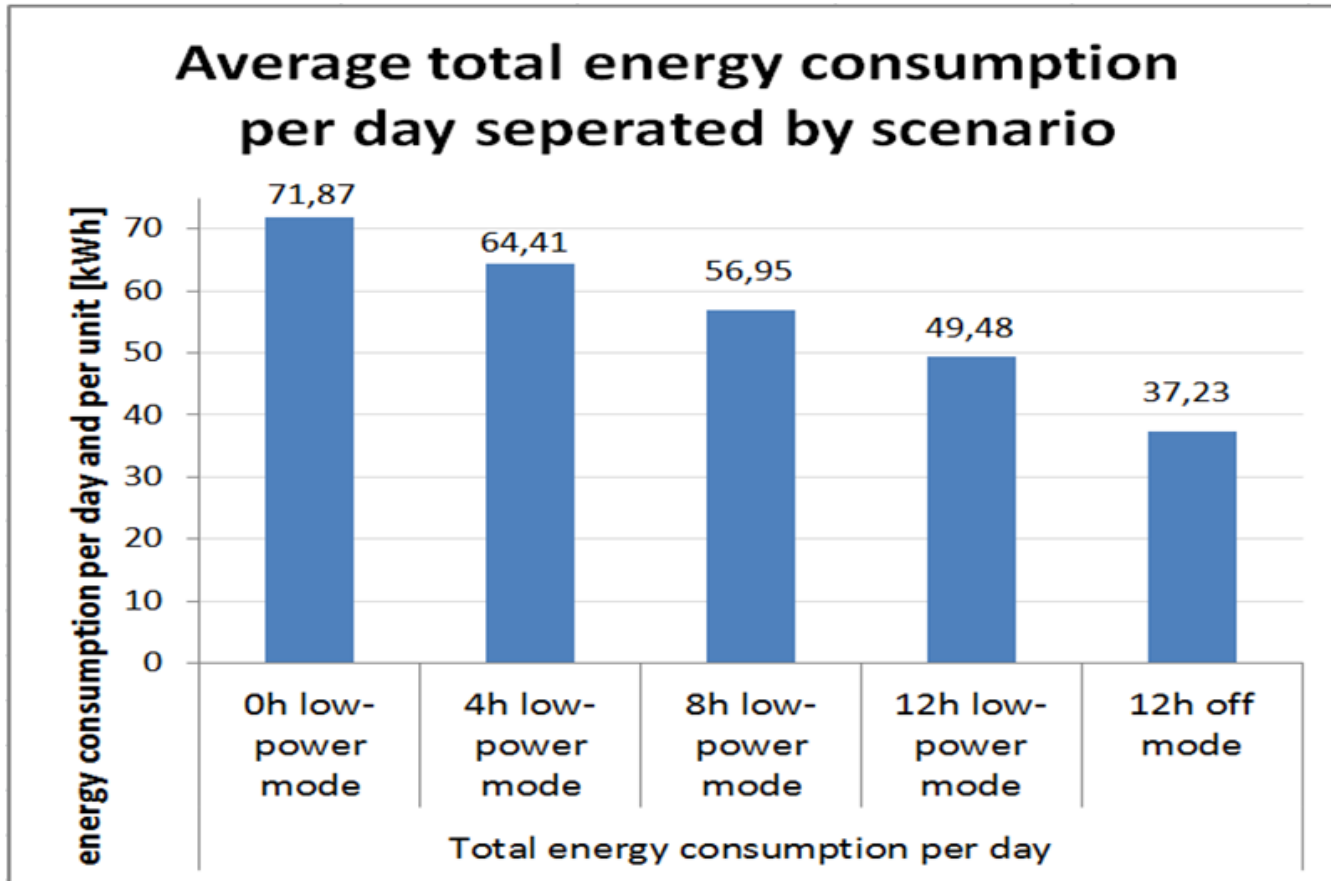


LOW POWER MODE USAGE

- Some analysis of user behavior showed that possibly about 70% of CT scanners are never switched to Off/LowPower during the 12h night time.
- The remaining 30% only 50% of the time on the average.
- This means that, unless user behaviour can be influenced, any reduction of the device energy usage in LowPower mode may have a limited net effect for users (around 1,9%), since the LowPower mode is rarely used.



USER BEHAVIOR





SRI GOAL FOR CT

INFLUENCING USER BEHAVIOR

- **Information to users – User manual/information**
 - The user manual or user information will contain guidance on how to use the CT scanner in an environmental friendly way with the aim of saving as much energy as possible according to the clinical needs of the user. Instruction will be provided on how to switch the scanner into the energy saving modes and how to switch back to active modes to ensure the scanner is ready when needed.
- **Information to users – User training**
 - Training of specialists provided by the CT manufacturer could play an important role in changing user behaviour regarding energy consumption.



SRI GOAL FOR CT

INFLUENCING USER BEHAVIOR

Information to users – Energy information

The SRI SC commits to communicate to clients and users of CT scanners, in the technical documentation or by any other appropriate means the relevant information concerning the energy consumption in the following scenarios:

- **Scenario Off:** This value represents the daily energy consumption when the CT scanner is switched off during the 12h night time (no energy consumption).
- **Scenario LowPower:** This value represents the daily energy consumption when the CT scanner is switched to LowPower during the 12h night time.
- **Scenario Idle:** This value represents the daily energy consumption of the CT when it is left in idle mode for 12h during night time.



SRI GOAL FOR CT

Format for communication of energy data

Typical Energy Consumption			
The typical energy consumption values have been measured according to the COCIR <i>Self-Regulatory Initiative CT Measurement of Energy Consumption, version 1.0</i>			
Model:			
Use Case Scenario*	Energy per Day	Units	Deviation, Justification
Idle	72	kWh	
LowPower	50	kWh	
Off	37	kWh	