



COCIR

SUSTAINABLE COMPETENCE IN ADVANCING HEALTHCARE

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

MRI ACHIEVEMENTS 2016

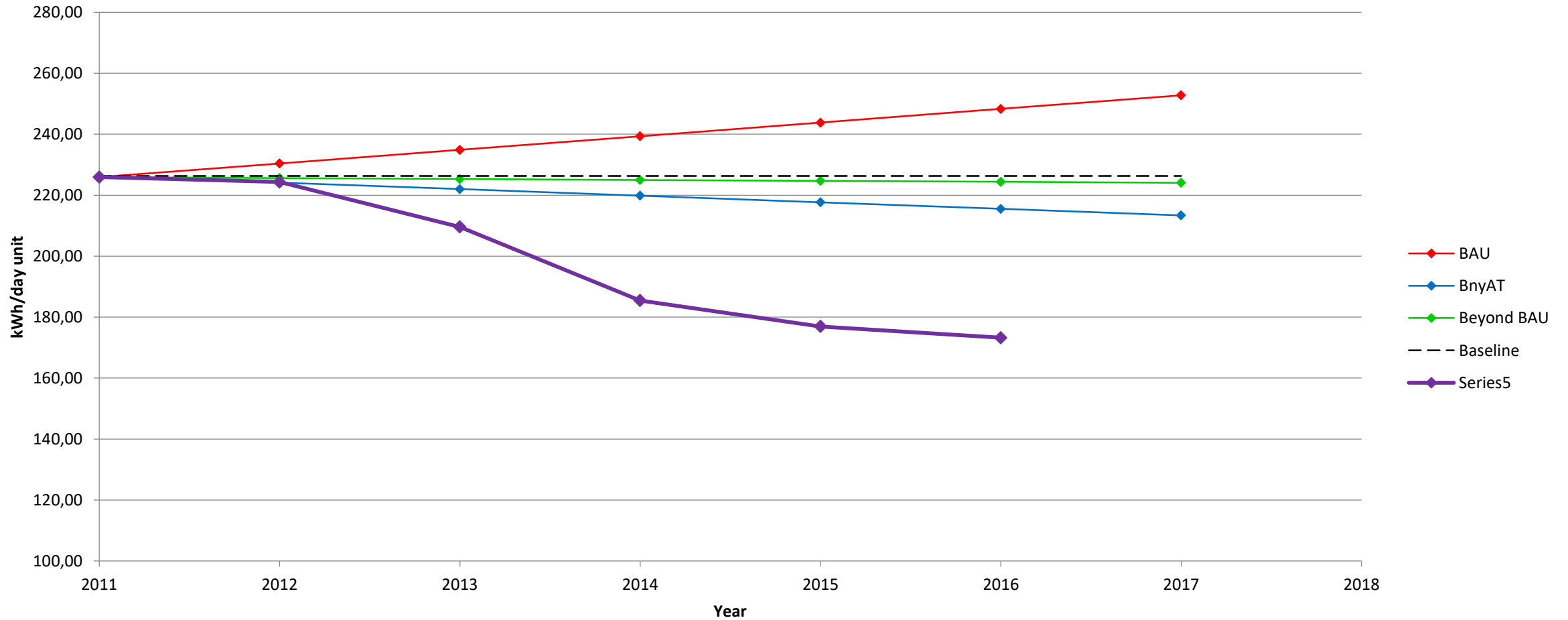
COCIR 6° ANNUAL FORUM

ON THE SELF-REGULATORY INITIATIVE FOR MEDICAL IMAGING DEVICES

- 15 March 2017 -

MRI ACHIEVEMENTS 2016

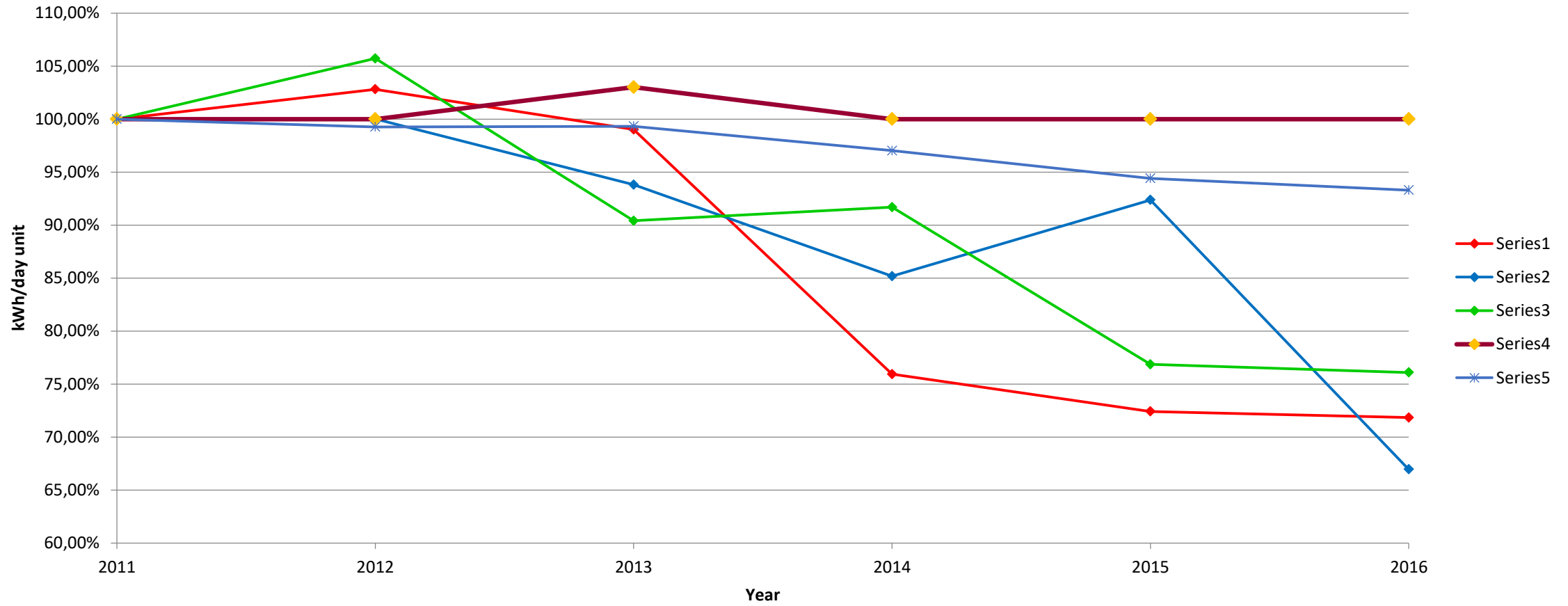
MRI ACHIEVEMENTS 2011/2016



DATA ANALYSIS



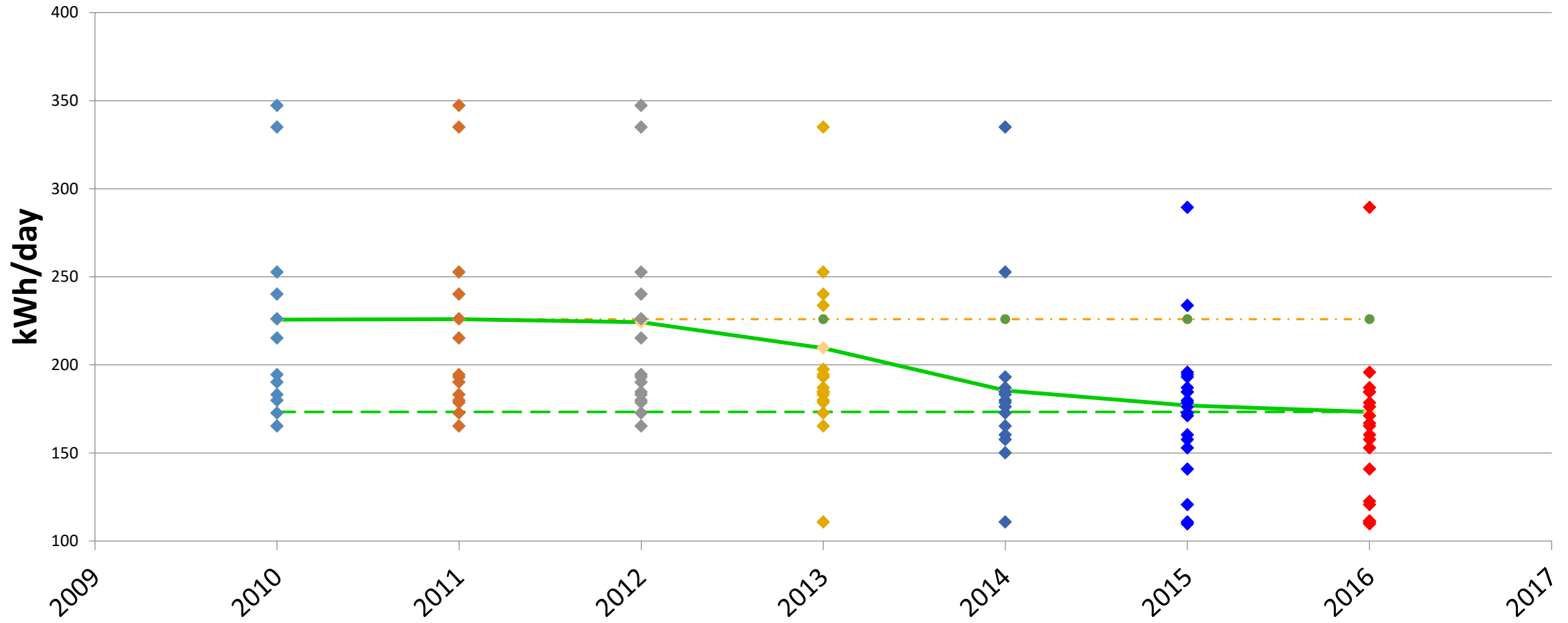
MRI development per Company



MRI DISTRIBUTION



MRI MODEL DISTRIBUTION PER YEAR



3 YEARS OF CONTINUED COMMITMENT

- In 2014 a SRI Member achieved a substantial decrease in market average by improving the software architecture and improving the chiller-cooling system.
- In 2015 a different Member obtained a significance reduction by implementing a technical improvement that was not identified during the study on improvements potential.
- In 2016 another Members achieved a drastic reduction in energy consumption by improving existing models and reducing the power usage in Off mode by 50%.

Lessons learned:

- The 3rd consecutive year of drastic improvement shows that new saving solutions are discovered as the eco-design process continues
- This confirms once again that an eco-design process and measurement tools (such as the COCIR methodology) are essential to continuously improve energy efficiency and to discover new solutions that can also be adapted to new versions of existing models.

CALCULATING SAVED ENERGY

- In the current SRI Report we estimated the energy savings achieved by the SRI by comparing the BAU scenario and the Beyond BAU. Those scenarios were calculated in 2010 on the basis of many assumptions.
 - ✓ *The reduction compared with the BAU baseline implies that the SRI will save in 2017 around 7459 kWh per unit sold according to the Beyond BAU scenario, equivalent to more than 2,6 tons of CO₂ per year per unit.*
 - ✓ *Assuming 5 days per week, 52 weeks per year*
 - ✓ *Conversion factor gCO₂/kWh = 350. Average value for Europe 28 in 2012. Source: CO₂ Emissions from Fuel Combustion (2014 Edition), IEA, Paris.*
- Now, after 6 years we can use real data to calculate the energy savings compared to 2010.

CALCULATING SAVED ENERGY

TOTAL YAERLY ENERGY SAVINGS						
UNITS		BAU kWh/d	kWh/u	SRI kWh/d	kWh/u	kWh/y tot
462,0	2010	104.296	225,75	104.296	225,75	0
394,0	2011	89.010	225,75	89.010	225,91	0
446,0	2012	100.684	225,75	100.036	224,30	842.869
454,0	2013	102.490	225,75	95.147	209,57	7.637.706
513,0	2014	115.810	225,75	95.126	185,43	16.133.603
604,0	2015	136.353	225,75	106.855	176,91	15.338.888
680,0	2016	153.510	225,75	117.808	173,25	9.282.581
	2017		225,75			49.235.648

The SRI allowed between 2010 and 2016 the saving of **49 GWh**, equivalent to **17232 tons of CO2** (*a small town of 12.000 households*)