

## PRESS RELEASE

# EARTO INNOVATION AWARDS 2015 ATTRIBUTED TO CEA FOR THE NAWACAP TECHNOLOGY & TNO FOR THE EXTRACTOR TECHNOLOGY

### Brussels, 14<sup>th</sup> October 2015

Tonight, the EARTO Innovation Awards have been given to [CEA](#) and [TNO](#). CEA received it in the Impact Expected category for the development of **NAWACap**, a new generation of ultra-fast carbon batteries that can be recharged in a few seconds, for a million of cycles. TNO received it in the Impact Delivered category for the development of **7XE EXTRACTOR**, an innovative welding torch that extracts fumes reducing the welder's exposure by at least 90%.

**The EARTO Innovation Awards** were delivered during a ceremony held on 14 October at the *BelVue Museum* in Brussels in the presence of **Carlos Moedas**, European Commissioner for Research, Science & Innovation. Commissioner Moedas said *"Research and Technology Organisations are where discovery and purpose come together – creating compelling bonds between academics and industry. EARTO has long been an important and valued partner to the Commission and I am delighted to join its 2015 Innovation Awards. Such prizes are a fantastic way of recognising that fulfilling your potential is as valuable to society, as it is to yourself."*

The Awards are given since 2009 to illustrate RTOs key contribution to innovation. This year, the structure has been reviewed in order to present a wider range of RTOs' work by creating two categories: "Impact Delivered" and "Impact Expected". The Awards are adjudicated by an independent jury, comprising: **Christian Ehler**, Member of the European Parliament, **Clara de la Torre**, Director, DG Research & Innovation, European Commission, **Simon Edmonds**, Director Catapult Programme, Innovate UK, **Prof. Hans-Jörg Bullinger**, Former President of Fraunhofer Gesellschaft & Member of the EC Research Innovation and Science Policy Experts High Level Group (RISE), **Jan-Eric Sundgren**, Senior Advisor to the CEO, Volvo and **Josef Affenzeller**, AVL Austria, former EARTO Board Member.

### CEA NAWACap: A new generation of ultra-fast safe & green carbon batteries

Increasing the speed and frequency with which electricity storage devices can be charged was the main challenge set by EARTO member CEA, in collaboration with Tours and Cergy-Pontoise universities and the spin-off NAWATEchnologies in their NAWACap project. Their vision was to marry nano- and clean-technologies. It resulted in the development of a new generation of ultra-fast carbon batteries that can be recharged in a few seconds, for a million of cycles and discharged in a few microseconds to few minutes. On top of being more efficient – 3 to 5 times greater energy density than current technology – those batteries are also cheaper, safer and more eco-friendly to manufacture. The global market is estimated to 5B€ in 2020 (25% in Europe, more than 50% in Asia). For more information on this innovation click [here](#).



**TNO 7XE EXTRACTOR: Extractor welding torch: "by welders, for welders"**

Welding smoke has adverse health effects on workers, which is why many countries have set strict standards to limit their exposure to such harmful fumes. To comply with these standards, EARTO member TNO has developed the 7XE EXTRACTOR, an innovative welding torch that extracts as much welding fumes as possible at source, reducing the welder's exposure by at least 90 to 95%, without hampering the performance of the welding-torch. The technology has been tested in 40 European companies in 2014, it has an expected economic life span of 8 years' with a return on investment within 2 years. For more information on this innovation click [here](#).



Maria Khorsand, EARTO President, said "RTOs focus on solving today's problems and delivering innovations that have real value. Our Awards are demonstrating RTOs' capacity to support Europe's innovation performance."

On the same day, EARTO has published the 2015 edition of its "**Innovation Awards**" brochure, a collection of twenty-six innovations featuring EARTO members which gives a flavor of the wide range of RTOs' work. They include articles on all RTOs who took part in this year's competition with a special focus on the 6 finalists which are, in addition to the two winners CEA and TNO:

- [Fraunhofer-Gesellschaft's awiloc®](#), an indoor positioning software that runs on mobile devices with no data communication or central server so that users' privacy is not compromised and SkinHeal technology, a new therapeutic method for chronic skin diseases.
- [SP Technical Research Institute of Sweden's](#) Sunfry Baking technology, an innovation that combines a unique selection of heating technologies to create a process that mimics the frying of donuts while conserving both taste and texture.
- [VTT Technical Research Centre of Finland's](#) Environmentally-friendly fibre-to-yarn technology, a new technique for producing fibrous yarns directly from wood pulp.

**END** - For further information, please contact Kadija Taffah, *Deputy Secretary General, Membership and Communications*, EARTO, +32 (0)2 502 86 98

## Notes to Editors

### **EARTO Innovation Awards:**

The EARTO Innovation Awards are given since 2009 to illustrate RTOs key contribution to innovation. This year the structure has been reviewed in order to present a wider range of RTOs' work. A new category "Impact Expected" has been added to the already existing "Impact Delivered" category. The Impact Delivered Award is given to an innovation which has proven its social and/or economic relevance, is today on the market and has proven its impact. The Impact Expected category rewards an innovation which has innovative originality, is not yet on the market as a final product/service but promises to have a great impact.

### **RTOs - Research and Technology Organisations**

**RTOs have a distinct mission and a key role in the knowledge and innovation economy:** they produce, integrate and transfer science and technology to help resolve the grand challenges confronting society and to exploit opportunities for new wealth creation and, hence, improved standards of living. RTOs accomplish their mission through a portfolio of activities and services.

**EARTO** is the European trade association of the research and technology organisations (RTOs), a non-profit organisation founded in 1999. EARTO groups over 350 RTOs, with a combined staff of 150,000, an annual turnover of €23 billion, special equipment and facilities to a value of many € billions and more than 100,000 customers from the public and private sectors annually.

[www.earto.eu](http://www.earto.eu)

**The CEA - Alternative Energies and Atomic Energy Commission** - is a French government-funded research and technology organisation and a prominent player in the European Research Area. The CEA is active in four main areas: low-carbon energies, defence & security, information technologies and health technologies. In each of these fields, the CEA maintains a cross-disciplinary culture of engineers and researchers, building on the synergies between fundamental and technological research.

[www.cea.fr](http://www.cea.fr)

**TNO is an independent Research and Technology Organisation**, has over 3000 professionals who put their knowledge and experience to work in creating smart solutions to complex issues. These innovations help to sustainably strengthen industrial competitiveness and social wellbeing. We are partnered by some 3000 companies and organisations, including SMEs, in the Netherlands and around the world. The organisation focuses on five transitions: healthy living, defence, safety and security, industry, energy, and urbanisation.

[www.tno.nl](http://www.tno.nl)