

Designing and Testing new management skills for the development of the Waste Electrical and Electronic Equipment Recycling and Re-use System in Europe



EwasteR PROJECT NEWSLETTER

DECEMBER 2017, ISSUE 04

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REFLECTIONS: WHY ARE RELEVANT SKILLS, COMPETENCE, EXPERIENCE AND **OUALIFICATIONS IMPORTANT IN THE FIELD OF ELECTRICAL AND ELECTRONIC EQUIPMENT?**

THE EWASTER PROJECT

The aim of the EwasteR project has been to emphasise the relationship between waste creation and resource management and to demonstrate the need for skills, competence and experience of entrepreneurs and managers in devising a solution and/or an appropriate intervention. The project's deliverables are designed to test this idea and to learn the lessons and/or points arising from it.

WHY ARE UEEE AND WEEE SO CRITICALLY IMPORTANT?

Used Electrical and Electronic Equipment (UEEE) are second hand items and their continued use is in line with i) the importance of the circular economy model and ii) the EU waste hierarchy. At some point however, UEEE will become **Waste Electrical and Electronic** Equipment (WEEE).

To understand the merits of the EwasteR project, it is important to consider i) the wider context and ii) the bigger picture relating to electrical and electronic equipment. Thereafter, it will be possible to understand i) how this project fits into the scheme of things and ii) why this project, in terms of its project principles, are important.



"Waste of electrical and electronic equipment (WEEE) such as computers, TV-sets, fridges and cell phones is one the fastest growing waste streams in the EU, with some 9 million tonnes generated in 2005, and



E-Waste Reuse and Recycling Spe-













The satisfaction of learners attended the National Pilot

The Last Partnership Mee-

Next Steps

wamitab













"Waste of electrical and electronic equipment (WEEE) such as computers, TVsets, fridges and cell phones is one the fastest growing waste streams in the EU. with some 9 million tonnes generated in 2005, and expected to grow to more than 12 million tonnes by 2020"





expected to grow to more than 12 million tonnes by 2020.WEEE is a complex mixture of materials and components that because of their hazardous content, and if not properly managed, can cause major environmental and health problems. Moreover, the production of modern electronics requires the use of scarce and expensive resources (e.g. around 10% of total gold worldwide is used for their production). To improve the environmental management of WEEE and to contribute to a circular economy and enhance resource efficiency the improvement of collection, treatment and recycling of electronics at the end of their life is essential".

The Earth's population is depleting our planet's natural resources at a rate faster than what is

needed for those resources to be replenished. Our consumption at present rates is unsustainable.

The importance of having an effective strategy in place for the world's finite resources is best summed up by this saying:-

"When the last tree is cut down, the last fish eaten, and the last stream poisoned, then only will mankind discover that it cannot eat money"

https://

www.ellenmacarthurfoundation.org/ circular-economy and http:// ec.europa.eu/environment/circulareconomy/index en.htm

http://ec.europa.eu/environment/waste/framework/

http://ec.europa.eu/environment/waste/ weee/index en.htm

World Wildlife Fund – The Living Planet Report 2012.http://wwf.panda.org/ about_our_earth/all_publications/ lpr 2016/

There is some debate as to who this saying is attributed to. Adapted by me.

WEEE photo's courtesy of; EC and Waste Management Solutions and Trust pilot

WHICH ARE THE BEST AP-PROACHES: COLLECTIVE INTERVENTION AND/OR INDIVIDUAL INTER-VENTION?

The answer to this question is both. The differentiator between the two types of intervention is in their impact. The Paris climate agreement is a case in point; it can be mirrored in other fields including WEEE, and the rele-

vant EU Directives in place. With that said, we all have a role and part to play in this.

THE EWASTER PROJECT, ITS OBJECTIVES, ITS CHALLENGES, ITS MERITS AND ITS VALUE

In 2014, when the Erasmus+ programme(Action: Sector Skills Alliance) was open for calls, 48 proposals were submitted in Europe for funding. Of those, only 6 were funded and of these, the EwasteR project was the only one to be funded in the environmental field.

The project has five principal objectives including i) the mapping of the current qualifications routes across Europe relevant to this field of UEEE/WEEE reuse and recycling and ii) to develop the

framework for a new professional qualification for managers and specialists in this field. This framework consists of i) a management area and ii) a vocational area.

The EU currently consists of 28 member states. Each member state is able to adopt a different approach under relevant EU directives, according to its own needs and requirements. In practise, this can mean that relevant infrastructure, regulation, skills, competence, experience and the qualifications framework in each member state can be found to be at different stages of development. This was one of the challenges that the project partners had to recognise early on.

There are also a number of different qualification/quality assurance frameworks in place in each member state. This means that a skill and/or competence, recognised by a qualification in one member state might not be recognised by the environmental agencies or stakeholders in another member state.

An easy way to visualise the EwasteR project is to think about one's own driving license. Whilst each member state will set its own criteria (theory/practical) which a candidate has to meet and pass to qualify; the license, once issued is recognised in each member state without question.

The project partners has had to develop, from scratch, an outline curriculum, training plan and set of materials in order to meet the aims and objectives under the project's deliverables. The outcomes have been trialled by way of

a pilot, with learners, in each of the partner's member states. Feedback from the learners has been positive. The development of the E-waste **Recycling and Reuse Specialist** qualification is being taken forwards to recognition, validation and transfer into RQF/NQF in compliance within national regulatory systems. The project's newsletters have covered progress made.



Peter Calliafas, WEEE management expert, UK

Getting a project of this type off the ground and building momentum is always a challenge. Not an easy task given the complexities mentioned and this has been achieved through the dedicated commitment and enthusiasm of all involved. This was followed by co-ordinated dialogue and project meetings

"Has the project been of value? In my opinion, the answer has to be yes." Peter Calliafas, WEEE management expert, UK

between the partners which was invaluable.

The lessons and points that have been derived from the EwasteR project have been used to progress the development of a relevant qualification and/or to help inform the development of a qualifications framework in each member state based upon shared ideas and best practice derived from amongst the partners themselves.

Has the project been of value? In my opinion, the answer has to be yes.



THE ERASMUS FOR YOUNG ENTREPRENEURS PROGRAMME: WORK IN PROGRESS

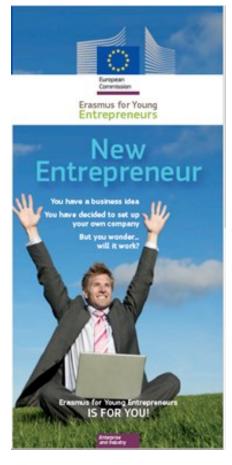
THE ASPIRING ENTREPRENEURS'

ITALY

Italian partners are cooperating with three young aspiring entrepreneurs wishing to work in the WEEE recycling and reuse management sector and who are available to apply the EYE proposal. Lucian. Raoul and Valeria are three motivated candidates - Lucian and Raoul also attended the National Pilot Training Course in Siena for E-waste Recycling and Reuse Specialist - which are currently committed to defining their own concrete business idea in WEEE reuse and recycling field to be reflected in a Business Plan as requested by the EYE programme. Through the EYE programme they are keen to be engaged in a business relationship with an experienced entrepreneur another European Union country having an insight into the day today activities of the WEEE business sector, which can help them to acquire the skills needed to run a small firm in Italy. They are also prepared to contribute to the development of the host entrepreneur's business and get the opportunities to cooperate with foreign partners or learn about new markets. We wish them good luck with their business idea, as we have no doubt that it will be successful!

POLAND

The Polish partners of EwasteR project - Institute of Environmental Protection (IEP-NRI), Institute



cation procedure and searching proper Host Entrepreneurs. We started cooperation with Intermediary Organisations to ensure any additional assistance to the candidates. Moreover, the press release about the programme was sent to several journalists.



Anna Szczesniak, IPED (PL) promoting EYE programme

Erasmus for Young Entrepreneurs

for Private Enterprise and Democracy (IPED) and Educational Research Institute (IBE) promoted information on Erasmus for Young Entrepreneurs Program widely via web pages, social media, e-mailings and during promotion events, National Pilot Training Course activities and other direct meetings as well as phone calls to the potential candidates. We offered them support in appli-

UNITED KINGDOM

The three UK partners are working to promote the opportunity of EYE programme to attract at least three aspiring entrepreneurs seeking to develop a business in the field of WEEE reuse recycling or related waste reuse and recycling activities. The partners will be using the networks developed through their EwasteR Project activities and also through their own networks relating to their day to day organisational activities. In addition, the

partners will make use of social media channels to raise awareness of the opportunity to get involved.

CYPRUS

Deliverable number 35, Erasmus for Young Entrepreneurs is a very important task for our project. All three local partners, the Cyprus Chamber of Commerce and Industry, the Cyprus Productivity Center and the Intercollege tried to promote the participation young entrepreneurs to their contacts and to the project strategic stakeholders list. During our third promotional event, that took place in June 2017 we gave great emphasis on this task. We have invited the Erasmus+ local contact point to make a presentation in order for our participants to get all required information directly from the Erasmus office.

The Erasmus for young entrepreneurs (EYE) can provide many benefits to its participants. We tried to promote these benefits in every opportunity we had with interested persons and with our pilot program trainees. First of all it will enhance the participants' employability at a local level and abroad. The opportunity to live abroad and meet new people, new organizations, improve foreign language proficiency and professional skills are consider only a few of the benefits a participant can profit from. European Commission Statistics (2014 evaluation of the Erasmus program) shows that on average participants have better employability skills after a stay abroad than 70% of all other students.



The goals of our participants to the EYE first of all should be to stay with an experienced entrepreneur in another Country to gain first-hand knowledge about business start-up in the area of Electronic and electrical equipment waste or re-use, without eliminating the opportunity to improve their business plan in a wide range of areas.



Additionally their goals could cover the following:

 Building self-confidence and skills: sector-specific knowledge or know-how, technical and management skills;

- Opportunities for collaboration with other entrepreneurs and the development of cross-border business co-operation;
- Networking and building of strong relationships, which can be useful for mutual consulting, business referrals, and for finding business partners abroad;
- Insights into different cultural and organisational settings and how companies function in another Participating Country;
- Insights into the business environment of another Participating Country.

THE HOST COMPANIES' SIDE

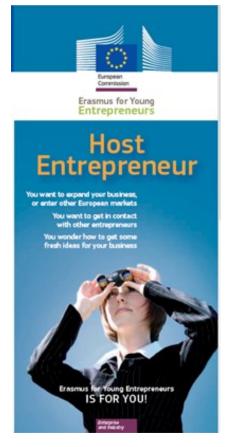
ITALY

Three Italian companies have expressed their will and availability to explore the benefits of internationalisation and crossborder cooperation as a route to increased their performance, sustainability long-term higher competitiveness, which are the main benefits of a successful business strategy, also in the WEEE sector. Besides they are keen to be involved in the EYE programme and to host and work with a serious, motivated new entrepreneur with fresh ideas in the sector.

"Riusatech" is a small firm - shop and laboratory - located in Siena working to refurbish and reuse customers' used electrical electronic equipments (PC, Radio, Mobile, etc..) to be resold in the most environmentally efficient way. It is mainly specialised in preparing for reuse practice: checking, cleaning, repairing, refurbishing, whole items or spare parts and then in reselling it through on line channels or within its own shop. http://www.riusatech.com/



"Pianigiani Rottami S.r.!" is an important company located in Siena operating in the WEEE recycling sector (specially the so called "big white": large household appliances). Its market is represented by a huge area in the Central Italy. The electrical equipment It can process is of-



ten end of life or damaged beyond repair so the best recycling practice is material recovery. An automated plant handles the recovery of the materials. The process involves breaking it down into small segments and then segregating the materials into large containers. These materials go back into the manufacturing chain to make new materials and products. Its electrical waste recycling service guarantees the adherence to the WEEE directive for e-waste recycling. http://www.pianigianirottami.it/



"Reware" is a small Italian Cooperative and Social Business, founded in 2013 and based in Rome, highly specialized in IT refurbishment. Reware's main business is to refurbish and renew discarded computers, extending their lifecycle and thus avoiding their early management as waste, costly both in economic and environmental terms. It is a fully operating store and laboratory where it's possible to see how the activity is carried out as well as purchase refurbished computers. All regenerated products are also visible on the online shop at http://shop.reware.it ; https://www.reware.it/

Società Cooperativa Impresa Sociale

REWARE
L'informatica sostenibile

POLAND

First company we worked with was MB Recycling. We created together the European Development Plan for Enterprises.



http://www.mbrecycling.pl/

MB Recycling has two pro-

cessing plants for Waste Electrical and Electronic Equipment and used portable batteries and accumulators with a strategic location in Kielce. In addition, the company has opened three regional offices in Warsaw, Gdynia and Chorzów. MB Recycling's goal is to be one of the most sustainable and quality oriented companies dealing with WEEE and waste recycling. It works with companies all over the world. International activities result in the use of the most efficient processes in MB Recycling plants, as well as the acquisition of expertise and valuable experience.

Moreover, we are working with Symbiona on the application. Symbiona is group of companies operating in Europe and Asia. It works for industries and municipalities to help them gain return from their investment in wastewater treatment, water reuse, anaerobic digestion and biogas treatment solutions.



http://www.symbiona.com

The Employers' Union Chamber of Recycling (Związek Pracodawców Izba Recyklingu i Odzysku Odpadów) is next entity we are working with on the application. The Chamber gathers and consolidates entrepreneurs-employers operating in the waste sector and cooperating with each other to improve and modernize a broad-

based waste management system.



http://www.irioo.org

UNITED KINGDOM

The three UK partners are working to promote the opportunity of EYE programme to attract three host companies interested gaining Euroan pean/international perspective to support the development of their organisation. The focus will be on small and medium sized enterprises who are offer WEEE recycling/reuse services ideally but we will also include those working in related resource management/recycling and reuse fields that can offer a valuable experience to a new entrepreneur from one of the partner countries. We will be working with our organisation networks and also social media channels to encourage companies to participate.

If you are interested please contact:

- LCRN Ed Tombs vj@lcrn.org.uk
- wAMITAB Sharon Simpson <u>s h a ron.simpson@wamitab.org.uk</u>
- UCLAN Karl Williams <u>kswilliams@uclan.ac.uk</u>

CYPRUS

Participating in the Erasmus project not only gives the trainee participant an amazing opportunity to learn about work and life by living abroad, but it also brings an array of benefits to the host organization as well. Our effort to find some host entrepreneurs was not an easy task. The main barrier was the small business community in Cyprus related to waste and reuse of electrical and electronic equipment. We have contacted all stakeholders related to this economic activity, recyclers, shops selling and repairing electrical and electronic equipment and others without much success. By the time this newsletter was structured we had no news as far as this subject. A few companies were interested and we are trying to finalize their interest.

During our contacts with possible host organizations we emphasized the benefits a host entrepreneur can gain from his participation to the Erasmus program.

A company can benefit by the new ideas and skills of a dynamic young entrepreneur, itcan leverage its general knowledge from other European markets and grow international contacts, without even leaving the office. Our slogan was "This exchange could be the starting point for finding new opportunities for your business".

We consider that a host organization can:

- Develop international contacts
- Work with a dynamic new entrepreneur with new ideas
- Become acquainted with foreign markets
- Find innovative solutions to improve day to

- day operations and business
- Discover possible cooperation opportunities
- Extend operations and business to another country.



THE SATISFACTION OF LEARNERS ATTENDED THE NATIONAL PILOT TRAINING COURSE FOR E-WASTE REUSE AND RECYCLING SPECIALIST (4EQF)

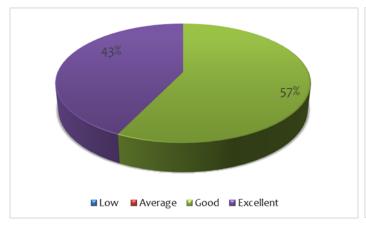
In this section we are presenting, after analysis, some key results about the satisfaction of learners attended the 160hs National pilot training course. For a deeper knowledge of the results achieved in each Country partners produced a detail monitoring report which can be available for reading through a request to:

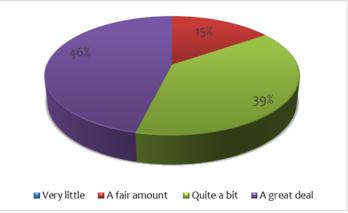
ewaster.eu@gmail.com

CYPRUS

The average rating on the overall training course delivered

How much do you think you have learned on completing the course?

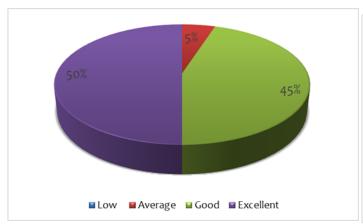


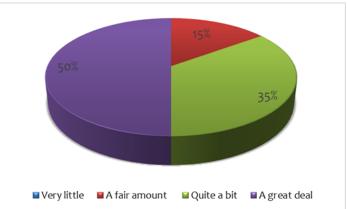


ITALY

The average rating on the overall training course delivered

How much do you think you have learned on completing the

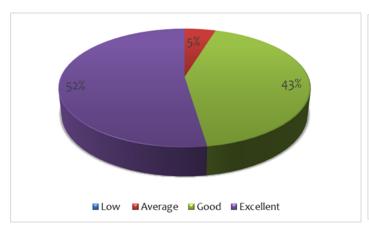


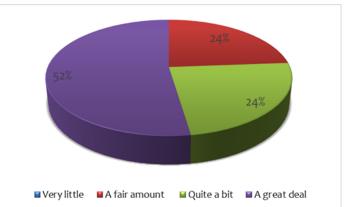


POLAND

The average rating on the overall training course delivered

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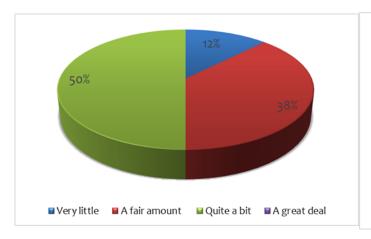


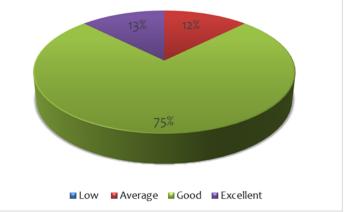


UNITED KINGDOM

The average rating on the overall training course delivered

How much do you think you have learned on completing the course?





THE INTERNATIONAL COOPERATION WITH EWIK KENYA

Over the three years of activities the EwasteR Partners have been developing a positive cooperation with the NGO E-Waste Initiative Kenya (EWIK) based in Kenya. We are working to share info, materials, experiences and know how on the WEEE management sector as implemented and produced by the project activities. We are delighted to present on this last Newsletter the EWIK profile.

E-Waste Initiative Kenya (EWIK) is a Kenyan based NGO, founded in 2015 and registered in 2016. Registration Number OP.218/051/16-106/10335. Our core business is electronic waste management specifically in the informal sector.

We are headquartered in Nairobi, Kenya, with networks across the country & East African region.

Our structure is alliance based working with thousands of informal sector networks across the country; however we do have a constituted board of Ewik to foresee smooth operations.

MISSION

Ewik is focused on raising awareness on the impact of e-waste on public health & the environment, creating jobs to the youth, women & retirees, through safe & smart disposal and recycling solutions in the circular economy.





EWIK Staff

Our dream is to establish strong institutions through which ewaste recycling can be nurtured into a veritable human resource.

- Awareness creation on ewaste impacts on public health & the environment.
- Collection of e-waste
- Refurbishing
- Service & Repairs
- Recovery of reusable components
- Training

THE VALUE OF WEEE RECY-CLING AND REUSE MANAGE-MENT IN KENYA

- ⇒ Jobs creation
- ⇒ Bridging the digital divide
- ⇒ Creative innovations
- ⇒ Empowering youth, women &retirees through technical training
- ⇒ Sustainable recycling on the circular economy.

EWIK & EwasteR COOPERATION

- ⇒ Sharing knowledge & information via social media &emails
- ⇒ Future Formal Partinership
- ⇒ Technical training/ Exchange programs /Benchmarks
- ⇒ Support in tools and machinery
- ⇒ Financial assistance / Donations



TV assembly using CTR monitor tube and other collected components







E-waste dismantling at EWIKs transfer center

E-waste collection by Ewik

Contact

Address	E-WASTE INITIATIVE KENYA, P.O.BOX 727-00600 NAIROBI, Park road Business Center 3rd Floor Suite 11. Opposite Equity Bank, Ngara
Weblink	www.ewik.org
Email	info@ewik.org
Facebook	https://www.facebook.com/ewasteinitiativekenya/

THE LAST PARTNERSHIP MEETING AND THE INTERNATIONAL E-SEMINAR IN LONDON

The 6th last transnational meeting for EwasteR Project Community took place in London on 11st December 2017, organized by WAMITAB and it was very successful! Partners from all fourpartner countries participated and cooperated for the development of the plan for completing the outstanding deliverables and finalizing the strategy to prepare the Final Report which is expected to be submitted to EACEA by the end of next March.



EwasteR Consortium during the last partner meeting in London





Peter Calliafas and Chris James (WAMITAB) during the International E-Seminar in London

The second day (12nd December 2017) the International E-Seminar) took place at the London Videoconference Centre venue. The event organised by WAMITAB was attended on-line by almost 90 participants from all Europe. Through a successful webinar partners presented the key results achieved after three years and discussed about the circular economy themes related to the project impact and its sustainability. The webinar will be available on the project YouTube channel.



NEXT STEPS

EwasteR Project will conclude the activities on 31st January 2018 and over the next months partners will be mainly committed to completing the final deliverables, organizing the final National WEB Conference, preparing the Final Report and building strong basis for a remarkable sustainability: the design, development and assessment of the new job qualification: "E-waste reuse and recycling specialist" and

the process of its transfer into NQF/RQF will represent the highest output which will enable partners to keep the EwasteR experience still alive after the project closure and for many years ahead!





WANT TO LEARN

CONTACT INFORMATION



www.ewaster.eu



ewaster.eu@gmail.com



www.facebook.com/EwasteRProject



@eu_ewaster



EwasteR Project



http://bit.lv/2rvlRSL

EWASTER PROJECT
NATIONAL WEB
CONFERENCES:
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