Seven (7) Partners from five (5) EU Countries

- Greece – ARVIS SA, OmegaTech, HSWMA
- Austria – BAN Sozialökonomische BetriebsgmbH
- Slovenia – Maribor University
- Romania – NCSPC
- Czech Republic – Mendel University

What kind of Partners:

- Two (2) SMEs with expertise in the field of Environmental Protection, Sustainability and Waste Management
- One (1) SME with expertise in ICT
- Two (2) Universities
- Website – www.recdev.eu
- Two (2) Associations

Website – www.recdev.eu
The development of ICT-based self and distance learning training courses familiarizing learners/users with the disassembly of Electrical and electronic devices and the identification of types and qualities of materials embodied.

It targets both low level workforce (disassembly), aiming at employability strengthening, safety at work and developing skills as well as higher employers (materials identification) covering a crucial training gap in the WEEE industry.

The training material will be prepared in the form of scenarios, will be enhanced with multimedia material and developed so as to take the form of 3D training scenarios.

The scenarios will in turn be transformed into 3D situations through Virtual Environment applications (ICT) simulating the real world.

In these, 3D virtual representations of real devices will be enacted. The beneficiaries/learners will thus be able to participate in simulations of real-life situations (based on the training scenarios) and disassembly of the devices.

Website – www.recdev.eu
Project's objective-2

To develop, pilot implement and evaluate an interactive, multimedia and multilingual training approach that will:

familiarize low level trainees with the WEEE disassembly allowing them to perform the activity virtually before going physically to the workshop and working area

help higher level skilled personnel of WEEE sector to develop skills on identifying the types and qualities of the materials included in relevant e-waste

To integrate existing practices and experiences of the partners into the design of high-quality 3D training scenarios

To modernize WEEE educational content with state of the art ICT tools and Ontology on WEEE

Website – www.recdev.eu
Stakeholders/Target Group:

- Recyclers
- Association
- VET Institutions
Collection of Multimedia data and information

Development of Training Courses and Ontology

Production of a 3D Training Platform/Software
Data Schematics

1. Big Household devices
2. Small Household devices
3. Consumables
4. Lightening
5. Electric & Electronic games
6. Medical Equipment
7. Security Monitoring Devices
8. Automatic Tellers and distribution devices

- Parts
- Derived/Produced
- Electric or Electronic Device
- Suggestions on how they can be used
- Extended Data
- Category
- Sub-category
- Title
- Management
- Photographs
- Re-Use
- Development
- Residuals
- Collection Method
- Transportation Method
- Storage Method
- Dangerous Substances
Interactive 3D Platform

- Selection of Device
- Projection of its external/internal various parts
- 3D Photographs and various other details such as toxicity, legal framework, collection and management approach
Interactive 3D Platform

• Ability to disassemble in 3D view each device in various parts
• Information for the various common parts such as motherboards or circuits
Interactive 3D Platform

- Simple in its use
- Friendly User Interface (UI)
- Open Code – Able to develop it further

General Description

A ceiling fan is a mechanical fan, usually electrically powered, suspended from the ceiling of a room that uses hub-mounted rotating paddles to circulate air. A ceiling fan rotates much more slowly than an electric desk fan; it cools people effectively by introducing slow movement into the otherwise still, hot air of a room, inducing evaporative cooling. Fans never actually cool air, unlike air-conditioning equipment, but use significantly less power (cooling air is thermodynamically expensive). The key components of a ceiling fan are the following:

- An electric motor
- Blades (known as paddles or wings) usually made from wood, plywood, iron, aluminum or plastic
- Metal arms, called blade irons (alternately blade brackets, blade arms, blade holders, or flanges), which hold the blades and connect them to the motor
- Flywheel, a metal or tough rubber double-torus which is...
Technologies incorporated

- Front-End
  - Unity3D Game Engine
- Back-end
  - MVC .NET application
According to the pilot users the RECDEV tool perfectly addresses the following challenges:

- lack of information from EEE producers regarding dismantling, treatment and location of dangerous substances
- the personnel fluctuation and the need for repetitive training for the new employees
- time and efforts required to train new employees
- offers detailed information on materials and dangerous chemicals
Further development of RECDEV platform

* Based on the pilot users suggestion, the following opportunities for further development are available:
  * To include recycling methods of materials and components resulted from disassembling
  * To add information on value of components and materials would be appreciated
  * To continuously update the platform with new types of appliances as the market is changing and the resulted WEEE waste is getting more sophisticated
Potential utilization of RECDEV platform

* WEEE dismantling and recycling companies – to learn about dismantling procedure and steps and get more information on materials and hazardous substances
* EEE Producers - as source of information in elaboration of legally required guides for users, dismantlers and recyclers
* Repairing and reuse workshops – to get more information about dismantling, components, materials and substances and develop and extend their activities
* WEEE Collective Schemes and Associations – for training their members: WEEE producers & importers, and facilitate the use to partner WEEE dismantling and recycling companies
Thank you for your attention!