



S.W.A.N.

a digital Solid Waste reuse plAtform for BalkaN

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VISION

- Development of an innovative Digital Platform that will act as a catalyst to the transition from linear to circular economy by creating locally and managing transnationally value chains for (non hazardous) solid waste, towards a society of zero waste.



OBJECTIVE

INDUSTRIAL & REGIONAL SYMBIOSIS

- Organise and interconnect all waste producers within a region, a country and/or between countries to recycle and recover their waste in industries.



Project Title : S.W.A.N.
a digital Solid Waste reuse
platform for Balkan

EU programme: INTERREG
BalkanMed 2014-2020

Total budget: 968.000,00 €
(85% EU & 15% national funded)

Duration: 2 years from 15
September 2017

Site:
<https://www.swan-interreg.com/>



PARTNERSHIP

Lead Partner-Greece:



LP1: Association of Municipalities in the Attica Region-Solid Waste Management Public Authority (E.D.S.N.A.)

Partners-Greece



P2: Greek Ministry of Environment and Energy



P3: Univ. of the Aegean- Research unit/Department of Business Administration

Partners-Albania



P4: Albanian Ministry of Tourism and Environment

P5: ILIRIA-Protection and Social & Environmental Development Association NGO

Partner-Bulgaria



P6: Bulgarian Industrial Association- Union of the Bulgarian Business

Partner-Cyprus



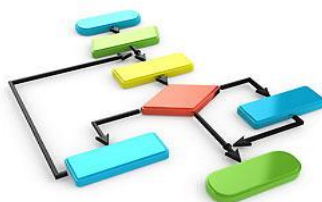
P7: Cyprus Univ. of Technology- Department of Environmental Science and Technology

HOW?

DESIGN AND DEVELOPMENT OF A DIGITAL PLATFORM THAT WILL:

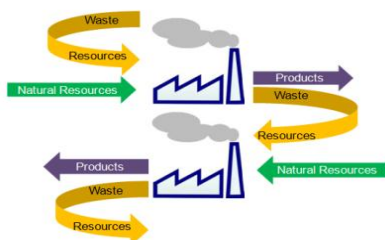


map solid waste sources
and potential receivers of waste
streams



ComputerHope.com

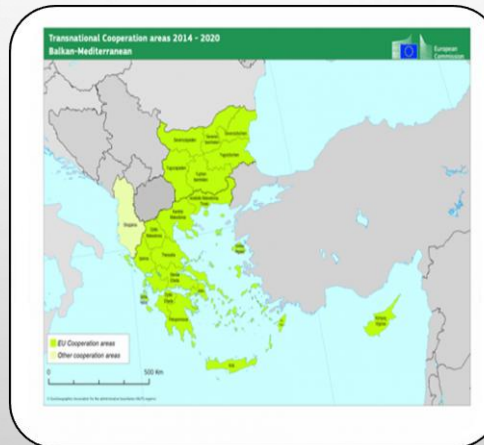
propose regional, national and
transnational viable waste reuse
pathways, through matching
supply with demand



establish a collaborative network
of relevant stakeholders in the
region

MAPPING

- All the existing sources of (non hazardous) solid waste including small, medium and large enterprises
- Quantitative and qualitative characteristics of waste streams (including spatial characteristics, categorization of waste requirements for treatment before reuse)
- Potential users/industries of these waste streams.



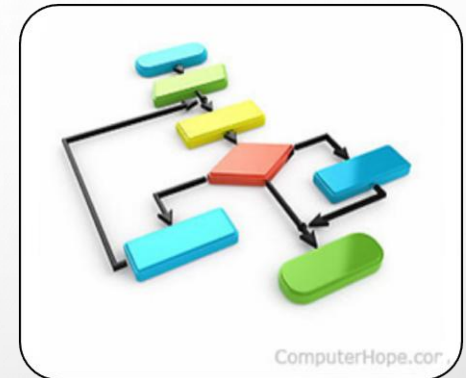
MATCHING

Develop and implement an algorithm that can match the sources and potential receivers, provide different options for solid waste “reuse” value chains and related business models based on criteria:

- geographical (proximity between source and sink),
- technical (suitability of waste type)
- financial (viable investment for all parties involved) and
- environmental (waste hierarchy).

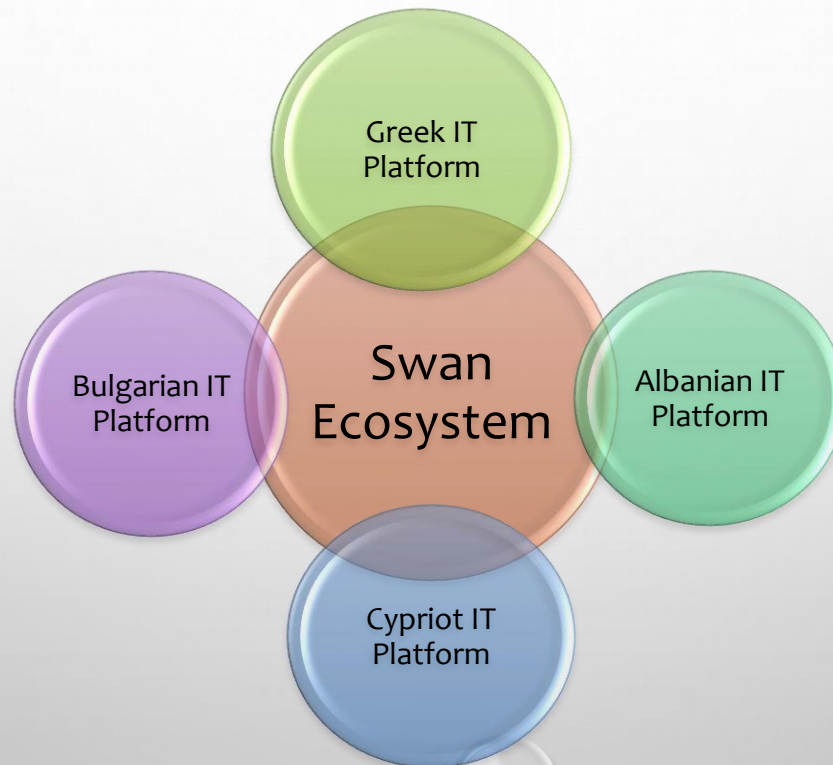
Inputs:

- Survey of Mapping
- Design and development of proposed list of profitable business models for each country
- Design and development of proposed list of potential transnational business models
- Performing and develop of PESTLE Survey among local actors



SWAN DIGITAL ECOSYSTEM OF FOUR IT PLATFORMS/ DATA BASES

Each IT platform will act as a digital observatory for cataloguing the corresponding partner region's solid waste sources and flows. A common architecture will enable them to exchange information, leading to the creation of the SWAN Balkan Solid Waste Map—a unique dashboard of solid waste flows and stakeholders in the region.



BENEFITS

FINANCIAL

- Industries will develop relevant strategies, quality specifications and standards for resource savings
- Waste producers and collectors will identify ways to recover value

ENVIRONMENTAL

- Secondary Material for industries to save non renewable resources
- GHG abatement
- Reduce waste disposal

SOCIAL

- Job creation, ranging from IT support for the four IT platforms, to new SMEs that will enter the resulting waste management value chains
- Low cost waste management

EXPECTED RESULTS

RESEARCH / PRODUCT DEVELOPMENT

- Swan Ecosystem Platforms and Databases
- Interested SMEs will be encouraged to introduce innovations (products, processes)

KNOWLEDGE TRANSFER

- Circular economy/ industrial and regional symbiosis
- Solid waste reuse value chains
- Policy recommendations

SUSTAINABLE NETWORKS

- SWAN Industrial Ecosystem access will remain free and active after the completion of the project
- Expansion to other Balkan countries by including additional stakeholders

Thank you!

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E.D.S.N.A. - Association of Municipalities in the Attica Region, Solid Waste Management

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