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EU CAPACITY BUILDING PROJECT | 2015 – 2021

ENVIRONMENT | SOLID WASTE | LOCAL COMMUNITIES | AWARENESS

Capacity Building in the water/ wastewater and solid waste sectors – phase 2 – northern part of Cyprus

BACKGROUND

Cyprus is a *de facto* divided island. Following the failure of referendum that would unite the island under the UN plan for a solution in April 2004, whole of the island entered the EU with a suspension on the northern part of Cyprus.

The northern part of Cyprus is thereof defined as “areas of the Republic of Cyprus in which the Government of the Republic of Cyprus does not exercise effective control”.

The objective of all EU projects here, are for environmentally sustainable economic development of the northern part of Cyprus.

Whereas the purpose of this specific project was to strengthen the TCC capacity for an enhanced service delivery to the citizens in the water supply/sanitation and solid waste sectors.

ABOUT THE PROJECT

The project was initiated in November 2015 and implemented for 6 years until November 2021 by a consortium led by Stantec sa/nv.

The main aim of the project was to improve the management of environmental services and bringing the Turkish Cypriot community closer to EU Environmental standards and practices.

The activities implemented can be grouped into five categories:

1. Partnerships for Service Delivery
2. Integrated Waste Management
3. Regulation and Control
4. Sustainable Materials Management
5. Civil Society Participation

Partnerships for Service Delivery

There is only one controlled disposal site, that is up to the EU standards, for the disposal of municipal solid waste in the northern part of Cyprus.

Local communities, located long distances from the controlled disposal site, are disposing their waste to regional uncontrolled disposal sites due to the cost of haulage. This uncontrolled disposal and ignitions are causing great amount of environmental pollution.

It is essential to cross-subsidise the haulage costs and ensure proper collection, recovery and disposal of waste.

There is also a need for a regional waste management body that would govern the regional components of the waste management system and ensure the proper allocation of the budget for local community finances.

The CB project supported the identification, assessment, stakeholder discussion, planning and implementation of partnerships for service delivery.

A Corporate Plan was prepared to assist the “Union of Turkish Cypriot municipalities” on organizational challenges to meet the local administration sector demands.

Regionalisation of waste management services such as transfer, haulage and disposal was activated and an operational model was proposed. However, organisational and financial barriers are not yet overcome.

A municipal Cost Allocation System (MCAS) was introduced to four local communities in an attempt to track costs of waste collection and cleaning services.

LESSONS LEARNED

CORPORATE PLAN

- ▶ “UTCM” recognised the need to modernise its political and professional management arrangements to meet the growing challenges facing its 28 members and agreed to encapsulate its objectives in its first Corporate Plan. This plan set out a range of activities to be addressed over a three year period to make the “Union” an effective representative body for the local administration sector and many of the mechanisms are already in place to implement the plan through a legacy toolkit of new policies and training programmes. The Plan was based on the principles of ‘strength through unity’ and ‘progress through partnership’ and is a foundation document for planning the activities of the “Union” in future years.

MCAS

- ▶ Tracking of individual service costs is not a mandatory requirement for local communities in the preparation of their annual accounts and the standard software packages in use within the sector are not being utilised to capture and report on this important management information. In addition, the availability of skilled staff is limited within local communities and most staff are under a lot of unrelated work pressures. Some local communities, therefore, adopted the simple MCAS approach as a voluntary measure in order to better understand their costs and enable improved management performance. Their experience can now be shared with their peers through “UTCM” or other informal channels.



Corporate Plan: 6 Thematic Areas

- 1.** Training & Development
- 2.** Enhanced Member Services
- 3.** Organisational Staff Structure
- 4.** Shared Services
- 5.** External Representation
- 6.** Political Representation

Integrated Waste Management

The Integrated Waste Management Plan is an important framework document that outlines waste prevention, recycling and disposal strategies, priority areas for investment and main actions for each waste stream.

Deficiencies in the regulatory framework for the waste sector, hinder the strategic planning of waste management and sectorial development.

Sustainable management of solid wastes can be achieved by mapping out the local context, leveraging investments into place and implementing organisational reforms.

Responsible producers need to step-up and start making their contribution to the sustainable management of specific materials/waste streams, such as packaging.

Waste quantities and composition study conducted for three seasons with data gathered from the controlled disposal site.

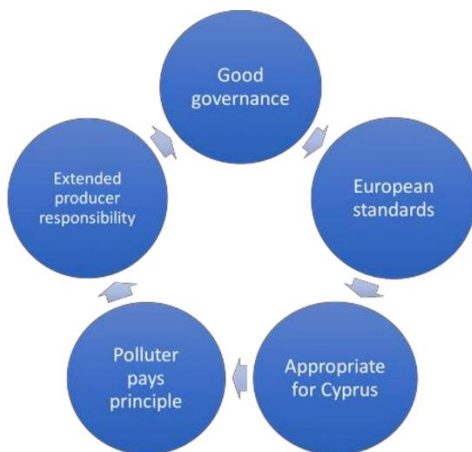
Integrated Waste Management Plan, a framework document that gives guidance on the necessary actions to meet strategic objectives was developed.

It includes measures for closure of the 50 or so existing uncontrolled disposal sites being utilized by the local communities, and development of an integrated network of transfer systems feeding into strategic waste recovery and disposal facilities.

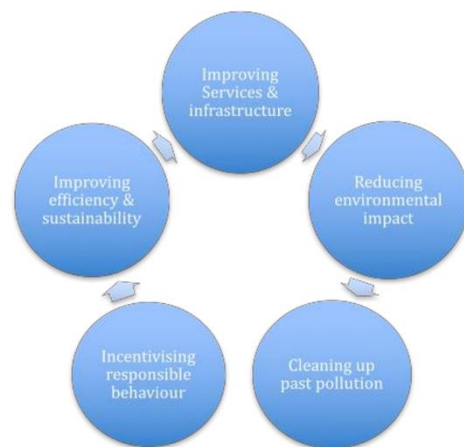
Support was also provided on one of the most hazardous and pernicious waste streams, health care waste.

LESSONS LEARNED

- ▶ Understanding the local context, collection of data for the development of an Integrated Waste Management Plan is an essential stepping stone to improve solid waste management systems. Professional capacity in regulation and control of the waste sector is lacking and needs to be strengthened.
- ▶ Sustainability of investments in the waste sector needs to be ensured through a combination of revision to the cleaning tax thresholds, improved budgetary tracking, management and subsidy mechanisms, and accompanying actions on organisational development.



IWMP Principles



IWMP Objectives

Regulation and Control

The “Environment Law” was enacted in 2012 and defines in general terms the legal text on sub-topics such as waste water, natural environment, air pollution and also solid waste.

Permitting, monitoring and enforcement of regulations in solid waste collection, recovery and disposal is not an easy task when essential pieces of “regulation” are not in place and technical and human resources capacity of the regulatory bodies are insufficient.

Utilization of digital tools is essential to enable data collection, monitoring and reporting tasks and efficiently enforce regulations. Capacity building for regulation and control in the central and local bodies is an ongoing needed action.

An Environmental Management Information System (EMIS) was developed and launched. The EMIS encapsulates data reporting by solid waste / waste water generators, scheduling of inspections and archiving the reports and additional modules on licensing/permitting. It can be easily extended to include other important environmental sectors such as air and noise.

Harmonisation of legal framework with EU acquis and Waste Framework Directive have been ongoing throughout the project lifespan with support provided on various waste streams.

A Roadmap software has been developed to assist TCc in the coordination of programmes and step by step actions needed to implement the Integrated Waste Management Plan.

LESSONS LEARNED

- ▶ EMIS is being used extensively by the waste water unit in “Environmental Protection Department”. Key factors contributing to this are the user friendly design accompanied with easy to follow manuals and reinforced with hands on trainings on example scenarios.
- ▶ Building trust between public authorities and the private sector is key to efficient regulation and control. The best strategy for compliance is voluntary compliance, based on clear regulatory provisions, backed up by professional communications and efficient tracking, control and reporting systems.

The screenshot displays the EMIS interface with the following data tables:

Waste Generation		Waste Treatment	
Statistical Data Set 1		Statistical Data Set 2	
Classified Tonnes		Statistical Data Set 3	
Incomplete Consignments		Classified Tonnes	
		Packaging Wastes	

Waste Waters		Inspection	
Classified Tonnes		Licences and Permits	
Sampling Report		Inspections Undertaken	
Industrial Wastewater Generation		Inspections Due	
Municipal Wastewater Generation			
Wastewater Treatment Facilities			

Extended Producer Responsibility	
Classified Tonnes	
EPR Materials Introduced Trend	
EPR Materials Reported	
EPR Arrangements Made	
Producer Responsibility Organisation Resources	

Environmental Management Information System (EMIS)

– Database for solid waste and wastewater

Sustainable Materials Management

Recovery of waste as a secondary raw material is limited to few materials/waste streams where there is sufficient market demand (and price) for the extracted materials. Some companies and NGOs initiate the separate collection, but the scope is limited.

The large bulk of collected waste is disposed either at the regional disposal facility, or at uncontrolled disposal sites. The threats to the environment are sharpened in cases where the disposal facilities sites catch fire.

Diversion of potential secondary raw materials from disposal is an essential aspect of the EU Waste Framework Directive and Circular Economy Action Plan under the European Green Deal. Promoting the circular economy, where materials are extracted from waste and reutilised in local production processes is a priority area of attention, socially, environmentally and economically.

Significant attention has been placed on promoting stewardship over specific materials/waste streams, such as packaging, sewage sludge, construction and demolition waste, green waste, and waste water.

Working groups are established consisting of relevant “departments”, local communities, associations, institutions and sector experts to initiate engagement and collaboration for enhanced management of specific waste streams.

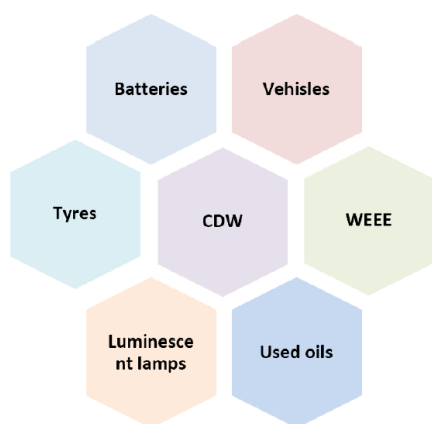
Feasibility studies and concept papers have been produced to support development waste recovery infrastructure on a sustainable basis.

A concept and business plan for an EkoPark, an industrial symbiosis initiative, combining green and bio waste composting, sorting of packaging and recovery of construction and demolition wastes has been prepared.

LESSONS LEARNED

- ▶ Negative perspective among the stakeholders were prevailing on the reuse of treated sewage sludge in agriculture, which can be an excellent soil improver. To overcome this misconception, scientific field trials were undertaken testing the application of treated sewage sludge to agriculture under controlled conditions. A study tour was organised to reinforce the experience or key stakeholders and with a new common understanding the previous perceptions were overcome.

- ▶ Collection and recovery of specific waste streams requires sustainable financial investments and effective monitoring and enforcement of the legal framework. Circular economy opportunities are evident. A spirit of partnership between the private sector and competent public bodies is key to unlocking these opportunities. In the EU, extended producer responsibility (EPR) is one of the key policy mechanisms underpinning sustainable materials management.



EPR for Special Waste Streams



Civil Society Participation

Civil society plays a vital role in the progress and development of a country by monitoring the local bodies and actions and holding the decision makers and regulators accountable for their actions, or lack thereof.

On specific waste streams that comprise great part of the municipal solid waste collected, prevention and recovery strategies require active public participation.

In this regard, involvement of civil society, NGOs, associations and such have been an indispensable part of the CB project.

Through engagement with various local bodies, institutions and civil society, a communications strategy has been developed, highlighting cultural norms and scoping areas of behaviour change intervention on waste management.

Environmental education curriculum has been developed and delivered to more than 3,000 primary school students.

Online, physical and hybrid workshops on topics such as extended producer responsibility, green waste, circular economy and green jobs have been presented in collaboration with other EU financed projects.

The Capacity Building project has benefitted from an excellent spirit of collaboration. Thanks to the dedication and professionalism of those involved, the project is a successful example of demand-driven capacity building support to the environment sector.

LESSONS LEARNED

- ▶ Continuity of behaviour change and awareness raising interventions and application of communication strategy on a long term are important on achieving the anticipated results. Sustainability of the application of communications can be achieved by building the capacity of the local organizations and communities working on the environmental and waste issues.
- ▶ High importance needs to be given on the environmental education as it is much easier to raise the awareness and change the behaviour of the younger generations. It is also important to prepare environmental education sessions in accordance with the local waste management context.

Awareness raising on waste management hierarchy and aluminium cans recycling at the EU Day Fair.



Capacity building is a two-way process whose success depends entirely on willingness and openness to collaborate.

The team would like to express thanks to all those involved in the Water/Wastewater and Solid Waste Sectors Capacity Building project, Phase II, The project was financed by the European Union in support of the Turkish Cypriot community and implemented by a consortium led by Stantec sa/nv from 2015 to 2021.

Thank You!