

DeCyDe for SUSTAINABILITY

September 2012







European Union European Regional Development Fund

FOREWORD

Within the big family of INTERREG IVC projects, SUSTAIN is a very good example for the success and added-value of classical networking projects. Already during the first two years of project implementation, joint "soft cooperation" activities such as thematic workshops and study visits led to a remarkable list of tangible results in the partner regions. Driven by the principles of openness, commitment and stakeholder involvement, the SUSTAIN partnership well demonstrates how small municipalities and coastal regions can benefit from interregional cooperation. For us, it is therefore always a pleasure to read the project's latest reports and publications, as they give us the opportunity to learn more about the achieved good practice transfers, improved policies and spin-off activities. Without question, solutions like the usage of organic materials for the pavement of local pathways in Cyprus presented at our Good Practice Fair 2011 in Kraków or Gran Canaria's successfully transferred model of an inter-governmental consortium for urban regeneration to the Province of Teramo will serve as a source of inspiration for European coastal communities – not only within but also beyond the SUSTAIN partnership.

Hence, we are looking forward to continuing our fruitful cooperation with Alan, Iris and the entire project team in the project's final year.



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COLOPHON

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The Interregional Cooperation Programme INTERREG IVC, financed by the European Union's Regional Development Fund, helps Regions of Europe work together to share experience and good practice in the areas of innovation, the knowledge economy, the environment and risk prevention. EUR 302 million is available for project funding but, more than that, a wealth of knowledge and potential solutions are also on hand for regional policy-makers.

THE SUSTAIN PROJECT

Funded through the INTERREG IVC programme, SUSTAIN has been a 3-year project part-funded by the European Regional Development Fund. It was a Regional Initiative addressing environment and risk prevention (Priority 2 of the programme) and the sub-theme water management. The project budget was €1.8m.

The objective of SUSTAIN was to create a fully implementable policy tool to help coastal authorities and communities throughout Europe to deliver sustainability on Europe's coast. This tool will be applicable to all 22 coastal states of the European Union. It is based on a set of easily measurable sustainability indicators that were developed and assessed during the lifetime of the project to enable Authorities to measure effectively the sustainability of our coasts.

The tool can ensure that integrated management of Europe's coastal areas will be more sustainable in the long term. It can contribute to delivery of Europe's renewed EU Sustainable Development Strategy which was adopted by the European Council in June 2006 and aimed at bringing about a high level of environmental protection, social equity and cohesion, economic prosperity and active promotion of sustainable development worldwide.

The project partnership was made up of 12 partner organisations from across the EU. The lead partner for the project was the Coastal & Marine Union - EUCC (The Netherlands).



"If you always do what you've always done, you'll always get what you always got".

This catch-phrase rather became the motto of the project after our Northern Irish partner Mr Patrick McCluskey intervened with the words in one of our meetings where we were reaching an impasse during discussions about some of our innovative approaches. The SUSTAIN project had been ambitious from the outset: we had set out to develop an indicator-based methodology and scoring approach which would allow a self-assessment, through the attribution of a numerical value. Comparing past with future assessments will allow Authorities to determine whether they were reaching their strategic sustainability goals. No-one had come close to doing this before.

Sustainable development is a term that is used daily now but it remains more of a generalised concept than a fundamental truth. It does not have defined parameters that can be scientifically determined. Neither is it constant but continuously changing. Indicators that are applied to determine sustainability today rarely take this into account and, paradoxically, use data that has been precisely measured. Unfortunately, communities and their Authorities still do not have a means of adequately measuring whether they are reaching their sustainability goals or not.

Within the confines of a three year project, SUSTAIN has developed a straightforward policy tool with some interesting innovative components which allows for a rapid selfassessment of whether sustainability goals and targets are being reached.



Alan Pickaver Coastal & Marine Union - EUCC Leiden

MEASURING SUSTAINABILITY: THE SUSTAIN POLICY TOOL

DeCyDe-for-Sustainability is a user-friendly, spreadsheetbased, self-assessment, decision-support tool which gives a numerical value to individual indicators. It comprises three separate components: setting strategic targets from within existing policy; applying a sustainability indicator set; and applying the decision support tool. Thereafter, the strategic targets can be re-visited and the process repeated every few years.

The first step-wise, cyclical procedure takes us from the starting point to the expected end point in a logical manner. It is policy oriented and incorporates the European strategic goals for sustainable development and integrated coastal zone management. Policy-makers must first agree their strategic goals and targets in order to determine if they are being reached and, if not, adjust them accordingly or make additional efforts.

The second step is to find the data for groups of indicators. The Indicator Set has been deliberately based on indicators that are generally already in common usage and ones that, according to EU legislation, should be regularly monitored. New indicators, although possibly more relevant to sustainability have not been introduced if there is no data-base from which to measure them.

Each partner has measured their sustainability effort using the DeCyDe-for-Sustainability tool. It should be understood that the scores presented should not be compared with each other as different indicators were used to produce them. However, they can be used as a reference value to measure any progress that is being made by using the same indicators in the future. Also, these values need not represent the partner's final score due to some data being missing when the index was calculated. SUSTAIN offers two sets of Indicators differing from the more traditional approach of applying a fixed, standard indicator set. These are:-

- CORE indicators which should be used at all times where relevant data is available. They are considered to cover essential aspects of coastal sustainability.
- OPTIONAL indicators which reflect local/regional specificities and which can be implemented and adjusted according to the local/regional circumstances.

These indicators have been robustly selected using criteria such as relevance to sustainability, availability of data and their ability to be scored. This approach provides a policy maker with a degree of flexibility so that indicators can be tailored to the needs of the strategic goals of the authority.

The indicators represent the four pillars of sustainability: governance, economics, environmental quality and social well-being. In order to show their relevance to sustainability the different indicators have been grouped into a number of Issues. In total, there are 22 key Issues broken down as follows:

Governance	5 issues
Economics	4 issues
Environmental quality	8 issues
Social Well-being	5 issues

SUSTAIN visit Lisbon, photo ARH Tejo



Schiermonnikoog, The Netherlands, photo https://beeldbank.rws.nl, Rijkswaterstaat / Joop van Houdt

Once the data has been collected – and this is the most timeconsuming aspect of the work – it can be entered into the DeCyDe-for-Sustainability scoresheet. This is ExCel based and all calculations are done automatically. The scoring of each indicator is achieved through given ranges of values. The "scoring through ranges" approach provides the method with flexibility: even data which cannot be specifically identified or might be considered imprecise can be used if identified within a range. Normally, indicators would be excluded if their precise value could not be found. The ranges of values are mainly defined by EU Directives and when these do not cover the specific parameters, limits provided by International Bodies are used. National and local regulations are also considered.

The issues and the pillars under which the indicators fall are then organised into matrices (based on the concept of comparing couples). The number of matrices, i.e. the number of levels that will be incorporated in the decision support method has to be defined. Weighting the Issues and Pillars allows an Authority to self-determine the relevant importance of these different parameters.

Decision makers can predict how the existing situation can be changed if, for example, they want to change the score of one or more Issues. That means that they can easily predict what will happen should they invest resources to improve the range score of a given indicator and thus the overall sustainability score, e.g. by increasing resources in waste management recycling by moving them from aquaculture production. Alternatively, they can forecast what will happen if they change the importance among the four main pillars e.g. putting more resources into Economics and less into Environmental Quality through a change in their policy. Through this exercise, the decision makers can evaluate and assess a large range of ideas and actions within different policy options. They have a "number" that gives them their "score" each time they would take a decision, based on real data of the existing situation. They have the chance to anticipate the impacts of their decisions, identify the pros and cons of different options and discuss them among the entire group of decision actors and eventually reach an optimised decision. Because this decision is taken through a participatory process, with the consensus of the decision actors, there is a greater likelihood that they will all commit to support the implementation of their decision. This is one important issue: promoting the implementation of decisions through the consensus of decision-makers actors. The first time the exercise is completed, the number can be regarded as a reference value against which all future exercises can be compared, provided the same indicators are used each time. It can be seen that if the exercise is repeated in the future, a comparison can be made between the two applications to determine if progress is being made towards a more sustainable future. If the result, when the exercise is completed for the first time, is considered a base level (e.g. = 100) then any future change can be converted to a percentage increase or decrease. In this way, provided the same indicators are used in all cases, it is also possible to compare the effort being put into sustainability in any number of localities.

IMPLEMENTING SUSTAINABILITY

All of the partners are busy improving their sustainable development and, throughout the project have been sharing their experiences and best practices......

Samothraki (Local Authority)

During a visit to Samothraki, many of the partners were very impressed with the unique terrestrial and marine natural beauty of the island. These values that have been kept intact throughout the ages are now the strong advantages that the island has moving towards a more sustainable future. The coasts of Samothraki are among the few examples in Greece and in the Mediterranean where the coast has not been altered due to mass tourism developments and still retains its natural features. Moreover the quality of the coastal waters is ranked high due to the absence of sources of pollution such as industry or even mass tourism. An indicator of the quality of coastal waters is the exceptionally rich marine life that inhabits the seas around the island. These features are the strongest sustainability indicators in coastal management that the island of Samothraki has, and there is a willingness from the locals and the local authorities to sustain them. One of the municipality's policies to this direction is to encourage small, locally owned, businesses and co-operatives to sell highquality, local products. This helps to communicate a unique identity and values and with it the local natural environment.

The Municipality has focused also on other areas of sustainability which include, for instance, the development



of renewable energy sources and energy efficiency, environmental protection, public health & quality of life as well as physical planning. In other words it seeks to encourage the sustainable use of its resources towards a viable economic development.

The score obtained by Samothraki when using DeCyDe-for-Sustainability was 85.34.

ARH Tejo-Tagus River Basin District Administration, Portugal (Regional Authority)

Sustainable use of the resource "coast" is an important objective that drives ARH Tejo activity. We are responsible for the management of 290 km of littoral and work in close liaison with each of the 13 coastal municipalities. At the end of 2011, most wastewater treatment plants were fully operational and one of the reasons why our coast saw 45 of its 96 bathing waters certified with the Blue Flag. However, there are also beaches where we don't want to see infra-structure with road access or any sort of buildings. Therefore, we use the Coastal Zone Master Plans as a tool for littoral management, defining the uses and occupation consistent with the fragility of the biophysical systems

In Lisbon, partners were presented with local projects for coastal sustainability by the municipalities of Almada and Cascais. Then, partners were shown the work being done by the Coastal Master Plans and also the MarGov experience: building social sustainability for the governance of a Marine Protected Area - a project awarded with the PRIZE Calouste Gulbenkian Foundation and the Lisbon Oceanarium. The Professor Luiz Saldanha Marine Park was established based on a top down approach and a reduced dialogue process. This impacted on artesian fisheries communities and a conflict arose... The project advocates a means for dialogue, deconstructing conflicts and myths, co-responsibility and promoting learning as a means for good governance. Partners also pointed out the Project Biomares: the recovery of marine habitats of the Marine Park.

In Sesimbra, partners visited ArtesanalPesca - the fisheries cooperative which advocated support for sustainability. Here they learnt how a group of fishermen, instead of competing with each other for the ever-dwindling fishery resources, were working together to maximise market opportunities.

In the case of the Municipality of Cascais, the DeCyDe-for-Sustainability score was 80.26.



Cascais, photo Rui Abreu, ARH Tejo

Province of Teramo, Italy (Local Authority)



Torre di Cerrano, photo Tamara Ristić

The coast of Teramo is the most important tourist feature of the Abruzzo Region: forty-five kilometres of coast unravelling itself along wide sandy beaches, protected areas and marine parks. Seven municipalities known as the Seven Sisters already hold a Blue Flag and have agreed on a marketing strategy centred on the promotion of the "sea as a product" by the constitution of the tourist Label "Costa Blu". An accommodation system of over 500 hotels, residences, campsites and tourist resort villages houses a population of c. 100,000 inhabitants which swells to about 300,000 during the summer months. This splendid reality is constantly endangered by the risk of marine pollution and the erosion of the coast.

The partners were able to visit the Marine Protected Area of Torre di Cerrano and were very impressed with the management of the area. "Torre di Cerrano" is actually a beautiful tower located in the heart of the Marine Protected Area. It has been overlooking the Adriatic coastal landscape since the XVI century. The MPA extends 3 nautical miles into the sea from the coast and spreads out along 7 km of coastline. It is formed of sand dunes for 2.5 km along the seashore and has a total surface area of about 37 km². The management of the area was entrusted to the Management Association of the Municipalities of Silvi and Pineto, the Province of Teramo and the Region of Abruzzo whose Presidents and mayors form the Assembly of the Association.

Using the DeCyDe-for-Sustainability tool, Teramo scored 151.78 for their current sustainability effort.

Regional Development Centre Koper, Slovenia (Regional Authority)

We act on a regional level with the aim of promoting business and economic development in our region: in the role of a regional co-ordinator of interests on a local as well as national level in the fields of regional development, economy, human resources and environmental protection. Our prime objectives are the enhancement of economic strength and organisation of the basic environmental infrastructure. We will do this through 14 measures divided into a number of programmes:



Salt pans, photo Alan Pickaver

economy; human resources; rural area, agriculture, fishery and forestry; and environment and the environmental infrastructure. Since we have only been in the EU for a short time, our first endeavours are/ the establishment of the basic environmental infrastructure for waste management, treatment of waste waters, drinking water supply, and sustainable mobility.

During a visit to Slovenia, we took the partners to the Sečovlje salt pans which is now a National landscape park. The museum of salt-making, a cultural monument of national importance, depicts the old procedure, the origin of which dates back to the Middle Ages. The complex encloses four restored salt-pan houses, their salt pools and the channel which supplies the sea-water. Of particular interest is the use of petola or bluegreen algae which grow on the mud layer and separate the developing salt crystals from the sediment. The salt pans are today the largest coastal marsh wetlands (650 hectares), and at the same time the most important Slovenian locality from an ornithological point of view. The variety of nesting and wintering bird species is much larger than on any other comparable with 288 species ascertained of which, in the wider surrounding area, 90 are nesting.

The DeCyDe-for-Sustainability tools gave Koper a value of 92.25.

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Sefton Council, UK (Local Authority)

Sefton Council has been very active in trying to improve its sustainability. Shoreline management, developing sustainable tourism practices, conservation including land management of the coast and its beaches; a successful Forest Plan for its coastal woodlands; recycling and waste management practices and ensuring water and environmental quality have all been targeted. We are proactive in relation to carbon reduction and renewable energy, specifically in respect of a Sustainable Energy Action Plan for Sefton and in supporting the recently launched Merseyside Sustainable Energy Action Plan. We are also partner in two projects funded through the UK Government's Local Sustainable Transport Fund (LSTF): the Sefton and West Lancashire Visitor Economy Project and the Merseyside LSTF project, both of which support sustainable transport projects that support the economy and reduce carbon emissions. Sefton works in partnerships and the experiences we have gained will support the aims of the Sefton Coast Partnership (local) and the sustainable delivery of the Sefton Landscape Partnership scheme, review of the Sefton Coast Woodlands Forest Plan and the aims of the North West Coastal Forum (regional).

When we completed the DeCyDe-for-Sustainability score a value of 64.08 was indicated.



Photo Dave McAleavy Image

Down District Council, UK (Local Authority)

Down district is one of the major tourist destinations that has benefitted from the emerging peace scenario in Northern Ireland. The strengths of Down DC as regards sustainability range from shoreline management, developing sustainable tourism practices, conservation and land management of the coast and it's beaches; recycling and waste management practices and ensuring water and environmental quality.



Promenade Newcastle, Co. Down, photo Tamara Ristić

These strengths are nowhere better seen than in Newcastle which won a top UK design award for the design philosophy of its promenade which reconnected the town to its natural environment, visually, physically and socially. A new wave return sea wall was built a metre above the level of the previous promenade and the gardens were raised to re-unite the shore with the street. The works included the realignment of 1,200 linear metres of Main Street, which involved the break-up of existing footpaths and their reinstatement with 12,000m² of granite paving, as well as realignment of granite road kerbs, replacement of the wearing course surface on Main Street, new services in footpaths, street lighting, traffic signals and street furniture. The design re-prioritised pedestrians with both stepped and ramped access. The most important public space in the town now allows restaurants and bars to spill out onto the pavement and fully exploit the majestic views of the Slieve Donard mountain. However, the vibrancy of Newcastle as an outstanding tourist destination belies some of the issues facing smaller communities along the Down Coast. Ardglass was once one of the most important locations for the landing and processing fish in NI. The application of successive EU fishing policy tranches has meant an uncertain future for Ardglass economically, sociologically and environmentally. How can such communities secure a decent present without sacrificing the community of the future.

The DeCyDe-for-Sustainability score for Down DC was 111.76.

Kouklia (and Limassol), Cyprus (Local Authority)

Kouklia has an administrative jurisdiction containing over 10 km's of coastline with a rich archaeological and Byzantine heritage and monuments. The last 10 years has seen a large development in the area surrounding the Community. However, it has a long experience in negotiating with developers and central authorities for achieving benefits for the Community and working for the protection of the natural character and cultural heritage of the coastline.

Kouklia hosted the kick-off meeting and during the meeting we felt it was important to not only see the local community but to experience the dividedness of Cyprus and the work being done to get the two divided communities working together. Part of the meeting was held in the UN Buffer zone which included a visit to the old, derelict, international airport which has been left just as it was when the Turkish army invaded; an aeroplane still sitting on the run-way. The participants heard from representatives from both sides of the divide about how they were cooperating and working for a future when the barriers are brought down.

Kouklia Community Council had local elections in December 2011 and the incumbent Chairman, who actively participated in every meeting and took a very close interest in the project, transferring a good practice he saw in the Netherlands, was defeated along with his whole Council. Regrettably, the new Chairman declared he had no interest in sustainability and withdrew from the project with immediate effect.

However, continuity in Cyprus has been assured by their Cypriot consultants, Xenia I. Loizidou and Michael I. Loizides of Isotech Ltd. Limassol, without joining the partnership, have worked to see the DeCyDe-for-Sustainability tool finalised. When they completed the exercise they scored 67.54.



SUSTAIN meeting in UN Buffer zone, photo Alan Pickaver

Coastal and Marine Research Centre (CMRC), Ireland (Research Institute)

CMRC is dedicated to improving our understanding of coastal and marine environments – advocating sustainability through research is critical to this objective. The Centre works in collaboration with a range of partners – locally, nationally and internationally. At the local level, the Centre has worked with various organisations within Cork Harbour to promote and implement an integrated and partnership approach to coastal management. Participation in SUSTAIN has enabled the CMRC to share some of the local examples of good practice for advancing sustainability e.g. the Community Trails initiative put in place by South and East Cork Area Development provides support for coastal and rural communities to plan, design and construct trails within their locality.

The benefits of community trail development are numerous. They provide improved access and connectivity, promote a healthy lifestyle, attract visitors, and generate income for the local community and local businesses, whilst promoting community participation in developing their locality. Such developments can make a marked difference in the quality of life of communities. The trails are designed with sustainability in mind and are bench-marked against national standards, and constructed with the view of providing a long-term legacy to the communities involved, both in terms of local infrastructure, and greater community participation and cooperation.

CMRC recorded County Cork's sustainability effort with the DeCyDe-for-Sustainability tool and it scored 69.86.



Community trail in Cork Harbour, photo Cathal O'Mahony



The Leibniz-Institute for Baltic Sea Research (IOW), Germany (Research Institute)

The Leibniz-Institute for Baltic Sea Research, located in Rostock, Germany is dedicated to interdisciplinary marine research with focus on the Baltic Sea ecosystem. The research program includes the cross cutting activity "Coastal Sea and Society". Within this activity, the Coastal and Marine Management Group carries out applied, interdisciplinary research to support coastal management and the implementation of national and international policy.

What attracted the partners most when they visited Warnemünde for a workshop visit - the beach management

and zoning. The fine sandy beach is both trademark and attraction. Therefore, sustainable means for sand management are most necessary. Instead of conventional sand management and replenishment, a combination of alternative measures is used. For example planting of special vegetation to maintain the dunes and capture sand, and mesh fencing above the tide line to trap moving sand. Additionally, the beach is zoned for different purposes which are supposed to increase the awareness raising and to involve the local community.

The score which IOW conducted for Warnemünde came to 67.10.

Canary Institute of Marine Science (ICCM) – Canary Agency for Research, Innovation and Information Society, Spain (Regional Research Institution)

The visit of partners to Gran Canaria Island allowed us to share knowledge on coastal tourism in mass sun and beach destinations. The ICCM chose for the site visits to the coast the tourist destination of the South of Gran Canaria, where the themes of whale-watching management and rehabilitation of obsolete tourist areas were dealt in depth.

Of particular interest to many of the partners was the Urban Consortium which has been set up in the South of Gran Canaria Island (a mature destination which needs renovation for a more sustainable future). The Consortium includes all



Whale-watching, photo Tamara Ristić

the competent administrations, which co-operate for the development and re-establishment of tourism activities and enhance the value of the area as a tourist destination, based on sustainable development and on integration and cooperation between administrations.

The agreement between the four institutions comprising the consortium: the Spanish Ministry on Industry and Tourism -through TURESPAÑA Institute- (national); the Autonomous Community of the Canary Islands (regional); the Gran Canaria Island Government (local); and, the Municipality of San Bartolomé de Tirajana (local) carry out co-operation and integration-based initiatives for further tourism development using a combination of land-use, urban and natural resources zoning and planning. Environmental considerations are key due to the presence of the Maspalomas dune system area. It has developed a Plan for the restoration of the tourist areas which integrates the interests of all the administrations with competences on tourism and spatial/urban planning and management. It has proven an effective way of integrating all the sectoral interests and actors, ensuring information exchange and transparency while at the same time accelerating the bureaucratic mechanisms.

The DeCyDe-for-Sustainability score was calculated by ICCM for Fuerteventura Island and was 110.55.



Service Observatoire Marin / SIVOM du Littoral des Maures, France (Marine Observatory)

The French Provence coast is known for its landscapes and beaches, making it a destination for summer holidays. This influx of tourists requires a proper understanding of the local authorities to minimize human pressure. With three pillars (observation, management and education), the Marine Observatory (SIVOM), service of the public association of communes of littoral des Maures is addressing various environmental issues. Among the key measures implemented in recent years are the certification for the quality of bathing water, monitoring of the coastline and the establishment of an ecological coastwise buoyage.

One of the most interesting activities noted by the partners was the work we are doing to raise awareness among boating users at the sea-front. We have placed brightly coloured information panels which show different materials and how long they take to break down in the sea when they are simply thrown away rather than discarded in the proper containers. These signs have had a very positive effect to reduce marine litter in Cavalaire harbour. This is complemented by a campaign at sea called "Ecogestes Méditerranée" developed at the regional level which aims to explain good initiatives to boaters, like casting anchors in the sand or not to use marine toilets near the swimming areas.

The DeCyDe-for-Sustainability score for Cavalaire was 97.62.



Photo © Observatoire marin

Coastal & Marine Union - EUCC, The Netherlands (NGO)

We took the partners to the special island of Schiermonnikoog when they came to visit the Netherlands. The islanders are making great strides to reach sustainability with drinking water, providing it from the island itself. At the moment, all water is pumped to the island from the mainland. However, it was quite another sort of natural material which caught the imagination of many of the partners: sea-shells! We had arranged a bicycle excursion in the dunes, the first time a number of the participants had been on two wheels for twenty years or more. The weather was very inclement, strong winds and heavy rain but we all cheerfully started the journey. The paths are constructed out of sea-shells rather than tarmac. They allow for good drainage but also encourage the natural chalk-loving vegetation which grows in abundance at the sides of the pathways. We were all able to savour the acidic berries of the sea-buckthorn. There is something very satisfying about the way the tyres scrunch over crushed sea shells. At any event, the experience has led to a direct knock-on effect with local products (wood in a tinder-dry environment) being used to replace tarmac on the island of Cyprus.

We also worked with the Province of South Holland whose staff gave us data and links to complete the DeCyDe-for-Sustainability sustainability score. It returned a value of 109.30.



Sea-shell cycle path, Schiermonnikoog, photo https://beeldbank.rws.nl, Rijkswaterstaat / Rob Jungcurt

BEST PRACTICES TRANSFERRED AND IMPROVED POLICIES

Converting organic, agricultural waste into material suitable for surfacing local footpaths

Mr. Christakis Miltiadous, President, Kouklia Community Council (CY)(2010-11)

"Our community under my Chairmanship made sustainability a standing agenda item on our agenda. During my visit to the Netherlands we were shown Dutch footpaths and cycle tracks made from local, natural products – sea-shells – instead of



The President of Kouklia Community and colleagues working with the wood shredders.

asphalt. I discussed whether our green, organic, agricultural waste trimmings could be used as an alternative viable footpath surface to the clay we currently use. Following a positive response and backed up with persuasive arguments from my expert consultants, Xenia I. Loizidou & Michael I. Loizides of Isotech Ltd, the community decided to invest €20000 in a wood-shredder. After several months of operation, it was producing ca. 40t/week of shredded material".

The material was being used successfully on public footpaths, saving money on the purchase and upkeep of the traditional clay pathways. Furthermore, a surplus of material was being produced which was being used as a mulch for trees in public areas which was cutting down our water usage since less water was evaporating from the soil. Economically, the new process was beneficial. Landfill for this agricultural waste was costing us €8000/yr. None of these costs were then needed which meant that the wood-shredder would have paid for itself in 2 $\frac{1}{2}$ years. We wanted to transfer this practice into our waste management policy."

Unfortunately, Mr Miltiadous and his whole Council were defeated in local elections in December 2011 and the new Chairman and his council withdrew from the project declaring that sustainability was no longer a priority in Kouklia.

Initiating a beach litter monitoring programme

Dr. Gerald Schernewski, Leibniz-Institute for Baltic Sea Research (IOW) (DE)

"Marine litter accumulation at beaches is a problem in many places of Europe. Such problems became obvious in the Mediterranean during a visit to Teramo Province. Heavy floods had transported large amounts of reed and litter down the river which accumulated at the beaches and along the coast. These problems and the local management solutions in Teramo primarily based on good knowledge of the litter problem (origins and destinations) and a well informed general public - were the motivation to improve the way that Warnemünde deals with marine and beach litter".

The beaches at Warnemünde are cleaned on a daily basis during the season. This is laborious and has high costs. Despite this, no marine and beach litter monitoring exists and the exact source of litter has not been explored. Therefore, based upon the programme of activities of Teramo and with bilateral discussions with this partner, IOW initiated a litter monitoring programme during the summer season of 2011. In cooperation with the NGO "Nature and Biodiversity Conservation Union (NABU) an improved litter management was developed which includes major environmental awareness-raising activities. These activities include a programme for teachers and pupils for litter monitoring and sampling at beaches. Further, the widely distributed, free magazine "Meer und Küste" contains specific information to inform beach tourists about the problem. Both aspects have helped to increase the awareness about litter in the sea and possible consequences for marine organisms. It is expected that these measures, to be repeated in the 2012 season, will help to reduce local litter deposition.



Warnemünde beach, photo Gerald Schernewski



Jellyfish, photo Gerald Schernewski

Information distribution to lessen the contact of bathers with jellyfish

Dr. Gerald Schernewski, Leibniz-Institute for Baltic Sea Research (IOW) (DE)

"Large jellyfish aggregations are a recurring problem in Europe. They can hamper coastal tourism and cause bathing prohibitions, potentially cause a risk to human health and create problems for commercial fishing. Such problems were pointed out in the Mediterranean Sea in a visit to the French partner SIVOM in Cavalaire-sur-mer. However, there are no management solutions to excessive jellyfish explosions and not all jellyfish are a health hazard. Therefore, good information by tourist authorities which improves the knowledge about jellyfish is critical."

In the Baltic Sea, where dangerous jellyfish species are rare, information is an especially suitable measure because people often have the opinion that all jellyfish are dangerous. Although managing jellyfish occurrence is difficult, providing information to beach visitors and influencing their perception and acceptance of jellyfish is comparatively easy.

As a result, IOW collaborated with the local tourist board of Warnemünde. 2000 flyers were distributed to tourists in July and August 2011 on seven different German Baltic beaches. These informed about the harmlessness of jellyfish and the one rare problematic species. An evaluation, by 755 beach users, was conducted which showed that the additional information led to a reduction in the perception of the danger of jellyfish in the bathing waters. Significant amounts of flyers were subsequently sold to tourist boards of other seaside resorts and it is planned to repeat the exercise in future seasons.

Crossing a political divide

Ms. Caroline Salthouse, Sefton Council (UK)

"The partners witnessed local organisations from across divided Turkish and Cypriot communities that have found ways of working together, building networks and co-operating on issues of common interest for positive change during a visit to Cyprus. These local organisations have a better understanding of the underlying history, particularly political history. They make bi-communal efforts and promote working together on sustainability issues at grass-roots level. Sefton Council and their expert, North West Coastal Forum, recognised that the particular approaches used could be a key positive driver in North West England where marine planners across two of England's major estuaries are working with people and organisations who have a common goal but have differing national legislation constraints: NW England has land and/or sea boundaries with Wales, Scotland, Isle of Man, Northern Ireland and Republic of Ireland. The need to work across these boundaries is critical if an effective marine plan on both large national and small local scales is to be realised."

The North West Coastal Forum, Liverpool University and the National Oceanography Centre brought together interested stakeholders at several workshops. It provided an opportunity to gain an overview of the arrangements for marine planning in the different administrations and to explore stakeholder plans and other Irish Sea management activities. The original idea of a small number of key organisations has now widened to involve, initially, 100 invited stakeholders who will propose and shape the ideas on how best to work together on crossboundary Irish Sea issues in the long-term. As a result of this transfer of good practice, local organisations are now coming together to kick start trans-boundary working in preparation for strong stakeholder involvement in Irish Sea planning and management. An Irish Sea Maritime Forum has been established and formally launched in 2012.



Launch event for the Irish Sea Maritime Forum, June 2012

A cross-cutting inter-departmental governance consortium to manage coastal areas

Ms. Doriana Calilli, Province of Teramo (IT)

"During a visit to the Canary Islands, the partners attended a working session on how members of different local, regional and national administrations have come together to form a Consortium to manage the urban rehabilitation of the south of the island at Maspalomas. It can develop specific planning or management proposals and agreements, collaboration between administrations, hard and soft constructions, etc. The effectiveness of the consortium has been high. I felt very strongly that similar areas in Teramo Province can be served the same way and when I returned to Italy I immediately began to see if my colleagues from different departments and bureaus were interested to set up a similar instrument. The response I got was extremely positive and I was given a green light to form a similar consortium to develop those areas in the province which required regeneration".

The Maspalomas Consortium is composed of four institutions representing national, regional and local government. This Urban Consortium is a planning and land management tool and has developed the Plan for the restoration of the tourist areas. It integrates the interests of all the administrations with competences on tourism and spatial/urban planning and management. Falling investment in the area had led to a drop in competitiveness and less income generation as visitors moved elsewhere. In the first six months of existence: it has developed a Plan for the restoration of the tourist areas, the first (out of two) objectives to be achieved. Teramo felt that a similar model could serve them and their corresponding run-down areas where the main part of the GDP is from coastal tourism and visitors. There is a similar lack of a unified strategic vision of development in terms of sustainability and inadequate infrastructure resulting from obsolescence and an inability to recognise new trends in the market. Equally, the responsible departments for planning development span different local, regional and national departments each having their own focus and priorities.

When Ms. Calilli returned to Italy, she began to see if colleagues from different departments and bureaus were interested to set up a similar instrument. The response was extremely positive and a green light was given to form a similar consortium. Following several meetings with relevant councillors, and bilateral discussions with the mayors both directly and by telephone, agreement was reached to form a Consortium. An Agreement of Cooperation and Statute was then signed to establish the Consortium of the Province of Teramo.

The Consortium has its own judicial Director and consists of all seven mayors of the coastal communities along the coastal strip and three departments of the Region of Abruzzo (Public Works, Energy and Environment, Planning). The Consortium will allow the sustainable rehabilitation of public infrastructure and private homes, through a strategic unitary vision for the area; an "Urban Redevelopment Plan" for the 45 km long coastal strip. At present this vision is missing because each of the seven municipalities has its own Territorial Urban Plan that does not integrate with the other six. The Consortium has also committed itself to increase its activities and has already achieved one relevant result: the conjoined establishment and management of the provincial observatory of sustainability which has been based on the Sustainability Indicators developed by the "SUSTAIN" project.



Teramo coast, photo Caroline Salthouse



Displaying plastic degradation times at beaches and harbours

Mr. Patrick McCluskey, District Council of Co. Down (UK)

"During one of the presentations in Cavalaire sur mer, I noted some of the measures being implemented by SIVOM Marine Observatory to curb human pressures on coastal ecosystems. Since we have similar problems in Newcastle, I recommended that we take similar measures. The Council agreed and this led not only to signage along the water front but also a change in our Litter Policy".

During the partner meeting in Cavalaire, signs and notice boards were presented which showed objects commonly thrown away by the general public at the sea-front with the length of time these objects remain in the environment. Such signage is missing in Newcastle, Co. Down where littering by the general public is common along the sea-front. The matter was subsequently tabled in a formal meeting of the Council which referred it to their Recreation and Community Services Committee. This Committee met and following a presentation by the SUSTAIN partner representative, agreed that similar signage should be introduced. Two Down District Councillors attended the additional SUSTAIN meeting we held in Riga where they took the opportunity of discussing the beach litter signage with the representatives of SIVOM. The funds were eventually raised and anti-littering signs have been erected along the most relevant sections of the Newcastle sea front. The Councillors further decided to improve their Litter Education Policy. Members felt that this was such an important issue that this proposed initiative was adopted and the decision was subsequently ratified by the full Council.

Certifying fish caught in maritime protected areas as an economic incentive

Ms. Margarida Nunes, ARH Tejo (PT)

"ARH Tejo is currently preparing the first Spatial Master Plan for an estuarine area in Portugal – the Tagus Estuarine Master Plan. Of particular relevance for input into this process is the example that was given in Teramo (IT), namely the use of an economic tool to support a more sustainable fishery in the territory. It was felt that the certification of fish caught in a buffer zone around a marine protected area could be an important strategy for inclusion in the management of the Tagus Estuary. This will allow fishery activities in a buffer zone around a maritime protected area in a way that is attractive to, and will involve, the fishermen. At the same time that those fishermen using the territory, will respect, and themselves supervise, the protected area and its limits. The certification of the fish caught is an incentive because it can be sold in the market with a quality brand. This strategy therefore meets what we also plan to develop: a marketing brand for the Tagus Estuary, as a sustainability brand."

Ten years of implementation of the Coastal Zone Master Plans at the Tagus River Basin District Administration (ARH Tejo) coastal zone have significantly contributed to a more sustainable use of the coast, the regeneration of the beaches and infrastructures connected with the public uses and bathing and recreational activity at the shoreline. The Master Plan is an important policy tool for the management of this part of the coastal zone. It aims to zone this territory in order to safeguard the main natural resources, while promoting a sustainable economic use through a participatory process to define a common vision and define strategic courses of action.



Photo ARH Tejc

SUSTAIN is being implemented by:



Coastal & Marine Union -EUCC (Lead Partner) Netherlands www.eucc.net

> Service Observatoire Marin / SIVOM du Littoral des Maures



France



Sefton Metropolitan Borough Council UK - England www.sefton.gov.uk

> Leibniz Institute for Baltic Sea Research Germany www.io-warnemuende.de

www.observatoire-marin.com





Samothraki Municipality Greece www.samothraki.gr

Administração da Região Hidrográfica do Tejo (ARH-Tejo) Portugal



AGÊNCIA PORTUGUESA DO AMBIENTE



Down District Council UK – Northern Ireland www.downdc.gov.uk

> Instituto Canario de Ciencias Marinas (ICCM) Spain - Canaries www.iccm.rcanaria.es







Provincia di Teramo Italy

www.provincia.teramo.it

Regional Development Centre Koper Slovenia www.rrc-kp.si







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