



Twinning Project MT05-IB-EN-01
Assistance to explore long-term projects
to manage Specific waste streams in a more sustainable manner
2005 National Transition Facility Programme – Twinning project between the
Ministry for Rural Affairs and the Environment of Malta and the Austrian
Federal Environment Agency

Component 3 – Information campaigns



The following concept is divided in two parts, Part A develops a public awareness campaign specialized on Waste-to-Energy by taking into account the specific Maltese situation. Although the campaign has its own dramaturgy it is build up like a building-block system/modular system. So parts of the campaign could be adapted to new circumstances but also could be used in other campaigns. Within the campaign also a case study for a thermal treatment plant is given.

Part B is adapted to the specific target groups of Construction & Demolition Waste, as they are more homogeneous than the broad group of involved and interested people in W2E. Again parts of the suggested steps could be launched within the so called "Do you love your island ...?" campaign.

Part A

1.	Foreword	1
1.1.	Background.....	4
1.2.	Rationale.....	4
1.3.	The Waste Hierarchy	5
1.4.	Case study for a thermal treatment plant	5
1.5.	Situation Analysis (in brief).....	7
1.5.1.	Situation in Malta.....	7
1.5.2.	Technical Analyses	8
2.	The Strategy.....	11
2.1.	The Target Audiences.....	11
2.2.	Action, Timing and Dramaturgy.....	16
2.3.	Teaser (phase I).....	17
2.4.	Best practice (phase II)	18
2.5.	Recommendation to the public (phase III).....	19
3.	Media and Tools.....	21
3.1.	Press conferences and press releases	21
3.2.	Website	21
3.3.	TV Shows.....	22
3.4.	Brochures.....	22
3.5.	Information days and Open Days (information stands)	23
3.6.	Materials for schools and students.....	24
4.	Further areas of using the slogan.....	25
4.1.	For best practice of the administration	25
4.2.	For giving recommendations to the public.....	25
4.3.	Additional issues under this slogan	26
5.	Time table & Costs	27
6.	Evaluation.....	28
6.1.	Evaluation of Press conference and Press Release	29
6.2.	Evaluation of Internet	30
6.3.	Evaluation of TV Shows	31
6.4.	Evaluation of Brochures	31
6.5.	Information Days and Open Days	31
6.6.	Material for Schools and Students	32
6.7.	Information Telephone	32
7.	Keywords.....	34
8.	Annex I.....	37

Foreword

Do you love your island ... - the “working headline” for a campaign which should raise public awareness to take care of the environment, handle in a sustainable way and also to accept measures in environmental technology. In this concept the title “*Do you love your island ...*” is the synonym for any slogan which is chosen by the responsible Maltese campaign manager and set into action following these ideas of teaser campaigning.

Other possible suggestions for that leading slogan could be:

- **Do you love your island ...**
- **Do you know where your waste is going ...**
- **Waste is ...**
... a public affair
- **My island – my responsibility**
my waste – my responsibility
- **How do you want Malta to look like?**

1

¹ Other slogans developed in the Working Group (Nov 2007), partly very provocative or ironic:

- Your waste is ill ...
... it loses energy/recourses/etc
- Waste is ...
... too expensive to be wasted
- Not my problem?! It is not my problem – is it my Problem?
- Forget your waste! You pay – we care

1.1. Background

A campaign consolidates all issues related to communication both strategically as well as the level of action. Not only short time topics and quick wins should be aimed at, instead of that also long term aims and sustainable impacts should be part/background of a campaign². This draft concept should give input to build up such a campaign including interfaces for extending these activities/slogans for several other environmental issues (and could also be established by the whole Maltese administration, including tourism advertisement). By acting in this common way the impact will be increased and through using synergies costs will be reduced.

1.2. Rationale

Determining the rationale for communication is a pre-requisite to good communication. Why is there a need to communicate about waste (or other environmental issues) at all? The objective of having an informed, responsive and participating public would be an accompanying strategic measure that could go a significant way towards achieving the same goals of the different environmental issues.

Beside the communication activities it is important to aim that modern waste management policy must take eco-cycles into account and regard today's waste as tomorrow's raw materials. And last but not least this approach leads into integrated sustainable acting. The term 'sustainable' is generally understood to mean development pursued in a manner that, in meeting present needs, does not compromise the ability of future generations to meet their own needs. Sustainable waste management means using resources more efficiently, reducing the amount of waste we produce and, where waste is generated, dealing with it in a way that will

² The analyses of the Maltese situation made it obvious, that there is an urgent need for long term related activities in environmental issues and especially in waste topics. From historical issues – which are not topic of this paper – such an approach has to break up a lot of prejudice. It will take some time until these mechanisms will work, but a trustful relationship between responsible authorities and the public will guarantee good solutions in the future and reduces costs and efforts.

help to achieve the goal of sustainable development. Nevertheless this also takes into account to be in a balance between the proximity principle and economy.

1.3. The Waste Hierarchy

The waste hierarchy was developed during the last 25 years and consists – in brief - of 5 steps and every single step run through a refining process since that time.

The first or highest principle of that waste hierarchy is waste prevention and/or reduction. That means in our daily life, but also in the industrial processes the minimisation of use of resources and hand in hand with that the reduction of the quantities of wastes should be our aim. Also the downsizing of hazardous waste falls under this principle.

The second step is reuse by using products or items again for the same or different purposes. So also the need of energy will be reduced.

Third: Recycling of materials by reprocessing waste materials to use it for the same, similar or other products again. This intends a separated collecting system³ to handle the “raw material waste” in the most effective way and therefore the support from site of the waste producers (mainly the consumers) will be needed.

Next level is the recovering by obtaining value from wastes by composting, energy recovery (will be handled afterwards) or other technologies.

In the last step, if there is absolutely no other appropriate solution, the disposal of waste by land filling/dumping describes the end of the waste cycle (respectively the end-of-lifetime goods).

1.4. Case study for a thermal treatment plant

A thermal treatment plant is a high sophisticate vehicle, which needs a lot of knowledge and technical skills. Similar to all other technical achievements also the

³ Bring in sites with for separated waste have been placed a few months ago, the quality of the separated waste is very high, only the collection rate is quite low at the moment. In that content we should take into consideration, that a place for pre selection and collection of different wastes is not foreseen in typical Maltese houses or flats. Two main reasons for that have been identified: first of all the household waste is collected daily (because of the hot weather) and second the waste at home is not collected in bins (plastic bags do not need so much space).

thermal treatment plant had its problems and misuse. Therefore very quick the disparaging name incinerator was given to that kind of plants (→ so incinerator stands for a bad image – smoke, smell, dust, emissions. But modern plants are more than the opposite of that).

This is already the first hint for Public Relations: avoid the name *incinerator*. Nevertheless people will not be emphasised on such a plant, only because of the more 'stylish' name ...⁴

But let's start step by step: The first step must be awareness about the need of such a plant. Here the waste hierarchy has its comeback. People must be aware of the situation that their daily behaviour leads into the situation that a waste treatment facility is needed. At that point the communication is reduced on "*waste treatment facility*" without a connection to any type of techniques (MBT, incinerator, ...)!

After raising the awareness of the need of a facility the possible technical solutions should be checked. In situation of very stable political conditions this happens in a technical working group which presents 3-5 feasibility studies and the politicians decide which proposal will be set into action. Under the specific present situation in Maltese that way will not be convertible easily. So additional awareness raising activities are necessary and can run under this recommended 'general' strategy⁵.

People should be informed about the principle functionality of a thermal treatment plant. In a first step very simplified information should be given e.g. *Waste in – Energy out – Emissions cleaned*. Step by step this information can be more precise and go into details (never forgetting, that beside of engineers nobody will be interested in non-comprehensible technical details nor understand it), so simplified plant plans and functionality plans might be helpful at the beginning. This could also be illustrated in a very simple interactive game (including e.g. calculation of recycling rates) in the internet.⁶ People can feed in the amount of their household waste or a

⁴ During one of the missions within the Twinning project the preparatory work for the third thermal waste treatment plant in Vienna was presented. The plant was build up in an area where also a sewage treatment plant is in operation. To give a positive spin to that accumulation of disposal "treatment plants" – this area was called the environmental centre.

⁵ Beside the activities in this communication strategy (teaser campaign), the strategy combines two main aims. First of all it should fill the gap of a long term relationship (and prepare the filed of additional activities in the future) and second to prepare the way for a waste treatment plant. Both points are so important that first and second should not indicate a ranking.

⁶ At the moment such a 3-D-animation is in development for the MBT in Gozo.

specific kind of waste (e.g. plastic bottles) and after some illustrated examples of what happened with that waste they can see the waste (and energy) balance. This balance can be projected on the general waste balance of the island – and so people can persuade themselves about the measures of the ministry/government (parallel to the results of best available waste treatment people can also be informed about the effects of incorrect handling of waste; e.g. batteries in household waste, littered plastic bottles, ...).

Next, people should get information, how they can check these promises in case of an active plant, e.g. an electronic billboard in front of the plant (and in the internet) will visualise the emissions⁷ (marketing keyword: tangibilisation). Also regular organised guided tours including the explanation of the plants equipment can build up the trust into the technology and the way it is operated.

Last but not least it should be clear for public that the “best available technology” (BAT) is used to prevent people and environment from negative influences. That means reliable, tested and proved technology will be used and not any kind of experiment (for example with ultra new methods)⁸ will be risked. So it might be good to present some reference plants which work under similar conditions.

1.5. Situation Analysis (in brief)

1.5.1. Situation in Malta

Analysing the waste history brings up four specific in Maltese situations:

- **Daily waste collection** (Because of the hot weather in Malta house hold waste cannot be stored at home for some days. So daily waste collections are operated)
- **Architecture of houses and (historical) villages** (The historical way of building houses do not foresee a room or place for (short time) waste storage and in the old villages with partly extreme small streets it is hardly possible to offer bring in sites which are close enough for every citizen)

⁷ Such an electronic billboard was installed in front of the thermal treatment plant ‘Spittelau’ (this is the famous plant with the artistic architecture). The main reason for the installation: Complaints of the citizens of Vienna, because they could see the smoke on cold days (mainly hot steam) and thought that this might be dangerous emissions.

⁸ For example: The performance of computers of Airplanes is rather poor, it will not be able to run a modern computer game, BUT the reliability of these computers are close to 100% to work without breakdown.

- No direct waste fees (Maltese people do not pay any fees which are in direct connection with the waste amount produced by themselves – all cost are paid from the general budget)

Point 1-3 makes it obviously that people are not “in contact” with all the problems surrounding the issue waste. Out of their eyes out of their sense might be the keyword for that.

- No recovery industry (In the past waste was not separated in Malta. This fact – and the low prices for raw materials in future times – handicapped or/and avoided the development of a recovery industry)

1.5.2. Technical Analyses

Technical analysis of the situation⁹ brought about three different scenarios:

- Grate firing (thermal treatment) scenario (including the use of biogas and the production of high quality compost)
- MBT-facility scenario (by building up 2 additional MBTs, including a FBC)
- Export scenario

(Detailed information about the scenarios in the technical concepts)

⁹ Specified by the technical working group within this Twinning project in the mission in week 24/2007.

The holistic waste situation in Malta could possibly lead to a solution which is illustrated as the following:

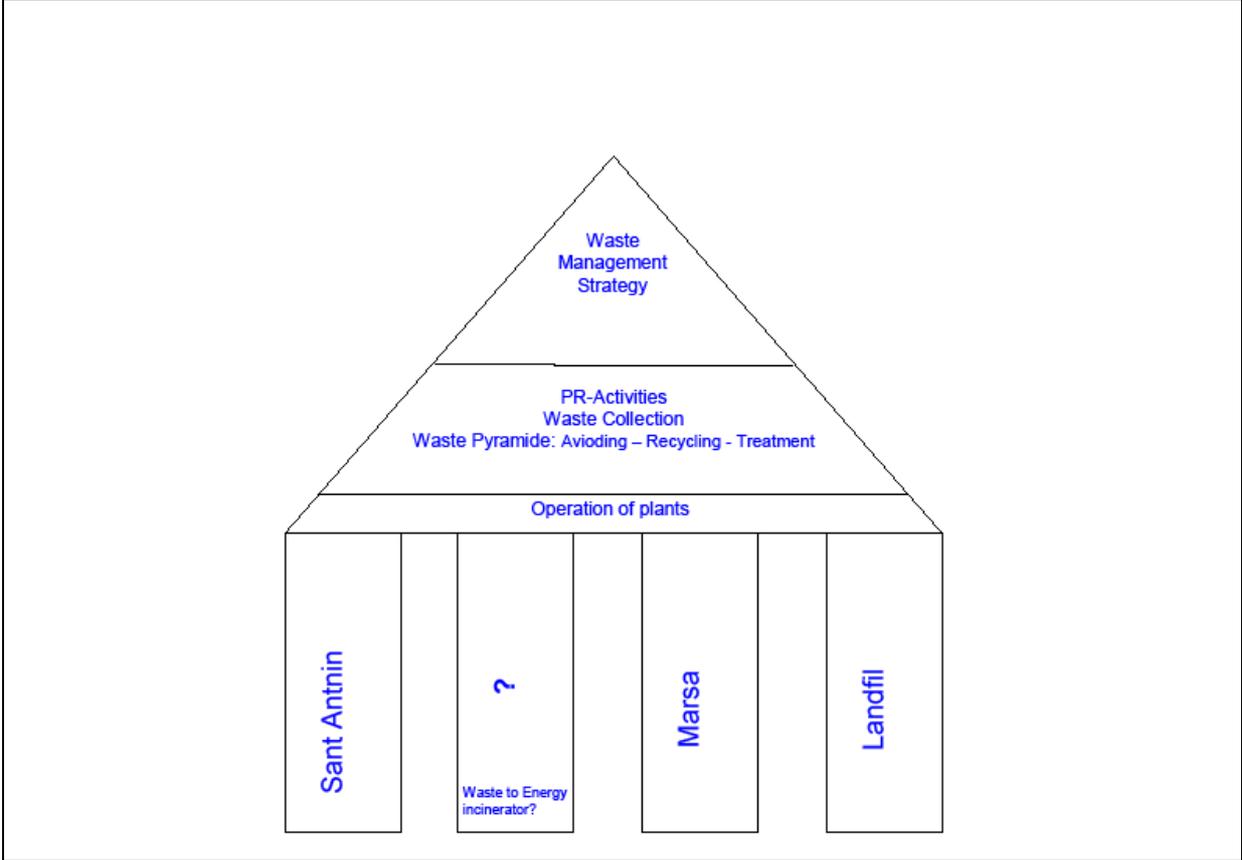


Figure from one of the first missions during the Twinning Project in Malta, October 2006

This example shows, that neither the issue waste can be solved within an ad hoc action, nor the messages about that necessary solution can be transported to the public just by – to bring it directly to the point – one or two short time advertisement campaigns, some nice pictures and new promises.

Furthermore the specific political situation in Malta – the elections are scheduled to take place by spring 2008 at the latest – must be taken into consideration for timing the campaign activities¹⁰. A campaign should run on a very general level (by raising general public awareness and prepare the field for further activities) proceeding the elections and has to go into further details after the elections took place. A time schedule which shows consideration to that fact is developed in chapter Time Table & Costs at the end of the concept (Chapter 6).

¹⁰ A comparable timetable for the Waste Management Strategy was developed in the beginning of the Twinning Project and shows, how such a timing can take place (Picture in Annex I)

Additional to that – and in respect that we are foreign guests here in Malta, – we got the impression that in Malta the environment does not play a major role in the daily life. To us it seems that the population is not so proud of their nature (similar phenomena can be observed in a lot of Mediterranean countries). So this point might be the key issue for a waste campaign or, over all, an environmental campaign.

2. The Strategy

2.1. The Target Audiences

For an efficient communication to succeed it is necessary to address the “right recipients” and at the same time give out the “right message”. By addressing more than a handful of people it is not possible to contact every single individual with a personalized message. So the use of mass media it is inevitable. For handling that, a short explanation from the field of communication theory is very helpful, because in this theory people are divided into groups. These groups are the so-called target groups, where persons with similar interests and/or behaviour, social/cultural/educational background are subsumed. Members of the same target group could be more precisely be addressed and reached with identical messages and via the same media than mixed groups of people.¹¹

Having in mind that target grouping is necessary, the first phase of this specific recommended campaign does not request the division into different target groups. At that moment the campaign will run on a very general level for the general public. It will serve as a door opener for further steps, which in turn must not avoid a differentiation in the next steps. So the campaign will be created to go from general to detail (and last but not least this is the way people “learn” a campaign). Here also the waste management policy (avoiding – recycling – waste to energy – landfilling) can be a good guideline for the campaign. It also fits very well in the dramaturgy to touch soft issues before the vote and dive into deeper details afterwards.

In later phases the following target groups could be addressed with different activities, services and content structure (not only in the environment sector, when the campaign will be extended:

Households and Small to Midsize Enterprises (SME): This audience is in contact with various types of waste and produces one of the highest amounts (about

¹¹ Target groups have already been researched by Wasteserve (Study together with Ernst & Young) and can be used again.

2.3 kg/HH&SMEs/day). So measures in this area as for example avoiding waste, waste separation, use of recycling products, ... are expected to be highly efficient.

Public Institutions and Multipliers: This audience includes all those target groups that can be considered as conveyers of the message, because public institutions should demonstrate the “best practice” and act as an example.

So the whole public procurement process can request or prefer suppliers, who use recycled material, reduce waste during the production process or act in a sustainable way¹². So an environmental protection orientated production becomes a big advantage for early adopters (and can be the starting point for a new spin; more about spins in Chapter 4.3). This public procurement philosophy can also be an obstacle for foreign companies in entering the market, if the Maltese companies can reach a leading position in meeting the obligations in environmental orientated production.

Schools (pupils and teachers) and kindergarten: Young citizens are the future generation as waste and waste treatment are one of the future issues. Additionally children have highest impact on their parents. So it is worth to set target group oriented activities for this group. That means that the content must be understandable for children, the “language” of children should be met and much more pictures should be used.

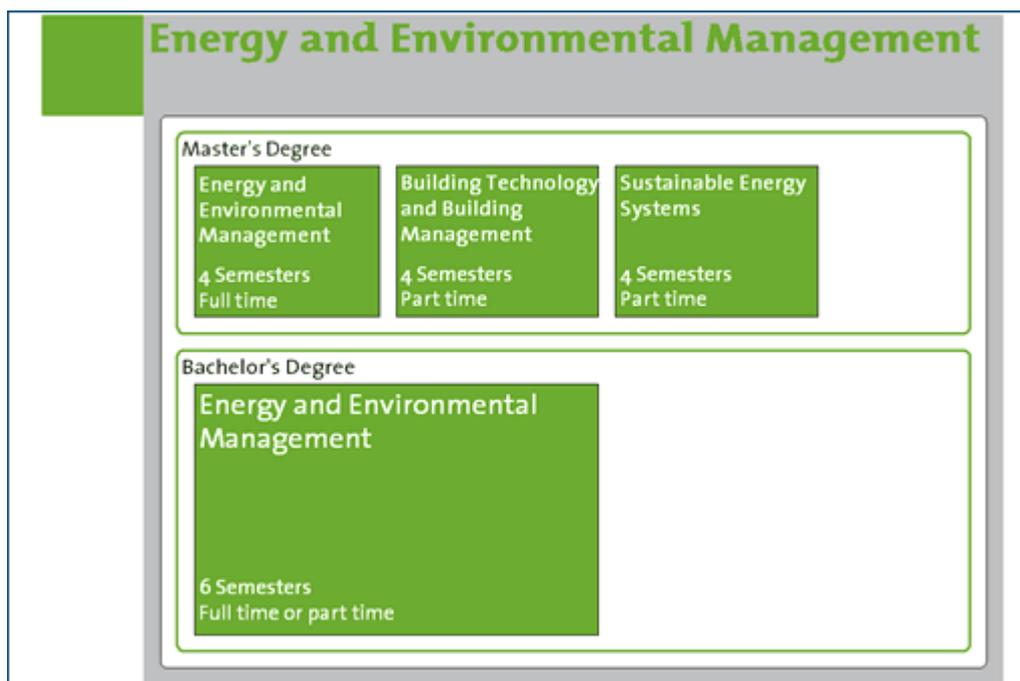
Especially in providing and supporting schools (and teachers) synergies can be used in coordinating the other PR activities with the curriculum of the so called eco-classes. Example: If the curriculum foresees a hotspot on waste separation, also the general hotspot on public relations activities should be concentrated on waste separation (beside the direct support of schools and teachers with information material, guided tours on MBT, ...). So pupils can directly check up the information they got and in that way they also get feedback about the importance of that issue. Last but not least this can also guarantee that children will get the same (and correct) information, because it is important to be homogeneous in giving information, even if they are from different sources.

¹² These restrictions are not in conflict with any EU-legislation.

In cooperation with the Ministry for Education the awareness of the importance of recycling technologies should be increased and a mid term aim should be the implementation of a hotspot *environmental technique* in the curriculum. This is also a very future orientated approach especially with the reference to the United States of America (until nowadays not really an environmental example to follow) which now starts to jump on the running train of environment protection by environmental techniques.

Universities: Support and promote research activities in the fields of waste to find new innovative solutions on the one hand and on the other to make people aware of the problem, the activities in this area and also the knowledge (Research example: How to use excavation waste most effective instead of dumping).¹³

An example for such a university education could be:



Or to be more precise the content in words:

Key areas of study could be energy and environmental management (especially Energy (conventional / renewable, implementation and restructuring), environment

¹³ In addition to this research award for scientific performance also for example an innovation award can be given: For use of C&D softstone Joe Galea, who creates miniature architectural landmarks (e.g. the Valetta Waterfront) could be awarded. (Source: The Malta Times; Sept 28, 2007). In an arrangement he could be obliged only to use reconstruction softstone from old buildings and therefore he gets the allowance to certify his miniatures ('Miniature of original stones from ... eg the barracks). So he might become a testimonial for a little contribution for C&D recycling.

(water / air / soil / waste), applied energy technologies, applied energy economics), implementation and transformation technologies, business economics, law, building technology, technical building equipment, process management, project management, control and communications technologies.

Industry: Hand in hand co-operation between company internal activities and collector should be supported. Producers should be consulted to optimise their internal production circles, therefore to reduce environmental impact (again the campaign could be extended with low afford also to e.g. sewages, air pollution)

International Audience/Tourists: The message is that the Maltese love their island and therefore it is an attractive place for tourists, too. So it is very important that the Maltese themselves become more aware of keeping their environment clean (littering!)¹⁴. → possible extension of the waste campaign to water issues (waste in water, water quality, ...).

Moreover clean and natural environments will entice 'quality' tourists. These quality tourists will have much higher expenses than the 'normal' tourist and will harm Malta's environment less than others (because they are aware of nature and landscape). Last but not least this specific kind of tourists is more faithful than others and spend their holidays for many years at the same place. So long term planning and long term calculating will be possible and that makes acting for the government as for the tourism industry much easier.

Moreover we should keep in mind, that the so called low cost tourist will follow the lowest prices immediately. But this is no added value for the tourist industry because it is simple to offer low prices from one day to the other, but it is not simple to offer an intact environment, a clean sea and intact nature. The negative impacts of the concentration on low cost tourist can easily be illustrated by the example of Mallorca (and having in mind the newest development, that Mallorca is losing this kind of income to Lithuania).

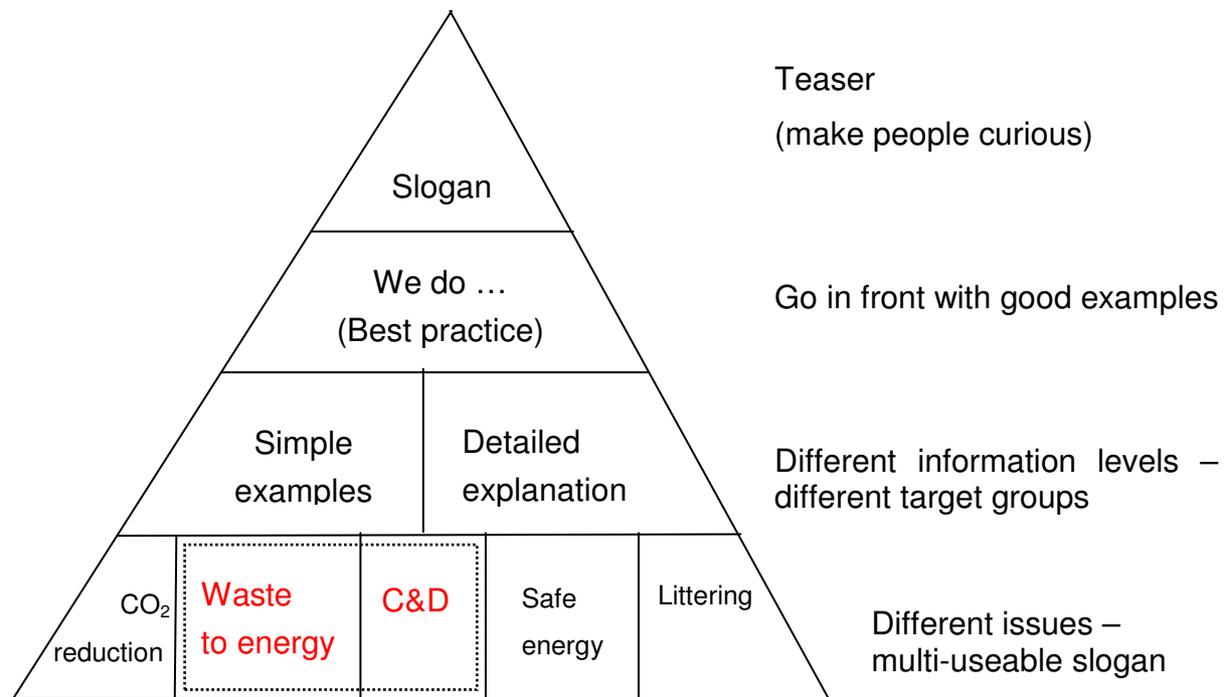
¹⁴ Reminding the Maltese in the campaign that they can enjoy their clean environment 365 days a year (and not only 2 weeks like the tourists), it should be clear for them that they will not become the "street sweeper" for the tourists. With that consciousness a campaign in connection with tourism should be more successful than any former approaches.

If it is allowed to categorise tourism, the low cost tourism is on the negative end of the tourism chain. So it should be asked, what will happen when these holidaymakers will move to a cheaper country?

Church: The Church as a target group sounds amazing in the first moment, but there are two specific points which are very specific. First of all the Church has a lot of influence here in Malta. The Sunday visit of the Church is obligatory in broad areas of Malta and so the influence of the priests to the daily life of the population is rather high. The other thing is, that the Maltese Church is highly interested in environmental issues, for example they are interested whether it would be possible to become EMAS certificated. So this is a very clear sign that the Church is aware of the different environmental topics and it might be possible to win the representatives of the Church as multipliers of the campaigns or at least of the overall aims of the campaign.

The Key message:

Do you love your island ...



Other already existing campaigns or parts of campaigns in the area of Waste (mainly of Wasteserve.) can be easily implemented at the baseline of the pyramid! It is also one of the big advantages that it is not necessary to start all existing activities again. By good adaptation of old slogans and sujets it is possible that already generated recognition will not get lost.

2.2. Action, Timing and Dramaturgy

Every campaign should be cost effective and reach high impact at the same time. To close this scissors a good timing is inevitable. It is comparable to a thriller movie, first of all people should become curious, so that they will follow the dramaturgy of the campaign. In using different elements of a campaign the excitement should be risen a way that more and more people are reached by the activities of the campaign. Step by step the highlight should be approached. After that people should have the impression that they have a benefit of following the developing process of the campaign (by getting answers, generating knowledge, etc.)

2.3. Teaser (phase I)

For the specific Maltese situation a teaser campaign is recommended. From former campaigns a lot of basic knowledge about the waste problems already exists. This public awareness was generated by a lot of (ad hoc) activities, mainly without internal connection or overall strategy between the activities. Sometimes these activities ended up very unluckily like the campaign for the separated household waste collections, where the delivery of the bins did not meet the timing of the campaign. So people are partly informed but also tired to hear about that again and again. So they should be woken up by different approach¹⁵. For such an action different disciplines and tools are available. Taking into consideration that all activities should be highly efficient and effective, the most useful type of campaign is a teaser.

To run a teaser campaign means, that in the beginning people are only informed by a slogan (or a question, a picture or something else). This short input should open a broad field of unanswered questions – without an answer – to make people think about that hint/mystery or in best case make them start to discuss about the possible backgrounds of that slogan. In the following everyone gets interested in the solution of that mystery and wants to know more about it.

So we should start with very short spots (details about the media in chapter 3, time table in chapter 6) which only show the slogan:

“Do you love your island ...?”¹⁶

Possible TV and radio spots are not longer than 5-7 seconds, advertisement in newspapers is very small, banners on the website of the ministry can be implemented, billboards – if available – can be used.

The high end of such a teaser could be a quiz, in which everyone can guess what the answer to the question “*Do you love your island?*” could be. Disadvantage: A quiz is

¹⁵ As far as it was possible to find out, the channel of a teaser campaign was hardly ever used in Malta. Therefore the surprising effect might be an additional advantage and will attract the attention.

¹⁶ Working title/slogan. Campaign could also run under a different headline, which makes people think about it as mentioned and suggested in the foreword.

very work intensive and in comparison to the other costs of the recommended activities within this teaser campaign very expensive!¹⁷

Advertisements via leaflet, brochures or foreign websites are not useful for the teaser activities¹⁸.

Advantages:

- people get interested (“What is the background of the slogan? What does it mean? Where can I find the answer of this mystery?”)
- a slogan can be branded, the slogan is multi-useable (different environmental issues and later on also for other administrations)
- short insertions are very cheap in the first implementation and will rise impact in the phase II & III (best practice, recommendations to the public)

2.4. Best practice (phase II)

After about 2 months of the teaser the answer to the question follows. People are told why they have been asked if they love their island. But not in a teacher-like manner in form of the following. E.g.:

¹⁷ Campaigns which are including response elements are expensive (money and work effort). The largest advantage of including response elements is the building up of a data base (especially people who react on such activities are obviously interested in the topic and therefore the priority A target group). Further on the above mentioned data base can be used for Customer Relationship Management (CRM) activities.

¹⁸ The channels (leaflet, brochures, folders) will be implemented into the campaign later on, because it is obvious that leaflets/brochures/folders without content are not useful. Nevertheless the teaser phase will make people interested in the leaflets/brochures/folders which will follow later on and so higher impact will be achieved.

We love our island ...

... the “Ministry of Rural Affairs and the Environment” uses only recycled paper and the overall use of paper was reduced by 15% since 2005 (this was one of the measures for waste minimization and avoiding waste).

... public procurement policy¹⁹ recommends to buy paper only from environment friendly companies.

To generate more publicity for the answers to the teaser and the overall campaign a press conference should be given. Journalists might be interested in the story of the teaser, the answer to the slogan and the ongoing activities. So the press conference and its content will be mentioned in the media and public awareness will be risen by that activity.

Remark: This best practice campaign should run until the election takes place. So on the one hand a positive image transfer from the ministry will take place and on the other hand no “hot issue” is tackled before the elections but awareness was risen for the next steps (see time schedule in the chapter Time Table & Costs).

2.5. Recommendation to the public (phase III)

After teasing and creating the brand “*do you love your island*” the third step gives recommendations to the public. Within these activities also the preferred solution of the possible scenarios (Chap. 1.4) could be made available. For example in the solution with the thermal treatment plant the separated use of the bio-waste material for biogas facilities should be explained to the general public as a very effective and environmental friendly treatment. So an image transfer will be started²⁰.

In this phase also negative messages can be transported – of course formulated in a positive way. For example the message for the “Polluter Pays Principle” (which

¹⁹ More about public procurement in Chapter 2.1

²⁰ As it is shown by the development and guidance of the whole campaign such an image transfer can only be achieved by a step-by-step interaction with the public (as it was also already mentioned in the kick off meeting for the twinning project in September 2006).

means that polluters should bear the full cost of the consequences of their actions and the potential environmental and human health costs of producing, treating and disposing of waste should therefore be reflected in the price of products and the charges associated with the management of wastes)²¹ could be:

Do you love your island ...?

Reduce waste, follow the recommendations of the waste pyramid, have in mind, that rising waste amount will also rise the prices for disposal

This kind of spots can be used for several different environmental issues – but in these cases without the preparatory teaser-phase. The spots will start in phase II; the best practice phase. So messages can be transported very quickly and effective.

Later on the brand “*Do you love your island ...*” can be used by the whole Maltese administration because the slogan is general and synergies could be generated.

²¹ As it is already mentioned and published in: A Solid Waste Management Strategy for the Maltese Islands; Ministry for the Environment, September 2001.

3. Media and Tools

This section outlines various media and materials that can be used. In case of a teaser campaign it is always necessary to keep the timing in mind and take into account which media has its best impact at what moment (dramaturgy).²²

3.1. Press conferences and press releases

These are classical tools as a follow up to explain the teaser campaign. Of course this could not take place before the end of the teaser phase (Chap. 2.3.), otherwise the teaser will be destroyed. In this way general information about the campaign will be transported to the public and will support the impact. (If the quiz was implemented the winner could be presented in a press meeting and the award could take place in an event – for example at a very sophisticated place or at the - at that time - rebuilt St. Antnin plant combined with a study visit for the journalists → combination of the plant with positive action).

3.2. Website

The teaser can be launched also on the website of the Ministry. Because of the cost/effectiveness relation it is not recommended to spend money on inserting the teaser on foreign websites. After the teaser phase detailed information could be offered, because visitors of the website will be more interested in the issue than recipients of TV-Spots, radio, ... The actual law, directives can be/are published – maybe also with comments to the text. These publications, including comments, lead us automatically to the next tool: the **FAQs** (*f*requently *a*sksed *q*uestions). FAQs are used to give helpful information and can be specified for the different target groups e.g. in case of waste separation for the general public/the SMEs/the industry.

²² In a campaign only tries to transport the advantage of a product timing and dramaturgy are less important because it does not mater for example if a spot is first on TV and afterwards in the cinemas or the other way round.

3.3. TV Shows

As we recognised, TV Shows are very popular in Malta. So communication work could also be done via these shows. It is necessary to identify the show masters who are emphasised on environmental issues (as Mr. Sharawang (right typing?) with his “helpful” is) and then to support them with the information about the most important environmental issues for Malta. It will be very likely that he will report about that, because a very hot topic will bring high ratings and show masters are only interested in (viewer) rates/market share.

The content can not be determinate directly because the show master should always try to be independent. But on the long end the support with good information sources will influence the messages in the TV Show and so content will be stimulated.

The biggest advantage of this kind of PR is the high reliability (because of the small possibility to take influence) and the costs – nothing more than providing information.

The same way of PR of course also works on radio and print journalism. Especially in print journalism very often the misunderstanding occurs that people who would like to give information and sources of information to journalists believe, that they should write the (newspaper) article themselves instead of the journalist. As I can say from my experience and interaction with several journalists, in most cases this is contra productive! So the recommendation: Give clear, reliable, honest and neutral information to the journalists. This way will you become the topic leader (key word: the spin ‘doctor’) and, although you should never give wrong information to the journalists, nobody will force you also to highlight arguments which are against your intention!

3.4. Brochures

Brochures (including stickers) may be printed, being aware that these tools cannot be used before the end of the teaser phase. So it should be used to transport the answers to the teaser and to give content to the interested public. Stickers: The MRAE itself is a good example for the stickers: Beside every light switch there is a sticker, which reminds us to switch of the light if it is not needed (as far as I

understand the Maltese language), so a similar sticker can also be developed for the waste topic.

3.5. Information days and Open Days (information stands)

Information Days/Open Days are more than simple information to the public. By presenting a plant, people can convince themselves about the functionality of the plant and that employees are trying to do their best. So the plant gets a 'human face'. On the other hand – and that is the two way component of such an event – the employees can present their work and be proud of their performance which also is an additional motivation for them.

It seems to be curious in the first moment, but also an Information Day at a MBT can be used to inform about thermal treatment! Interested people visit the MBT, get information about the functionality of the plant, can convince themselves that the plant works. At the end of this practical demonstrations it will be explained what should happen with the waste which was treated in the MBT. So detailed theoretical input about the advantages of the – at that time – not existing plant could be given.

This kind of public information can also be announced under the slogan of the campaign e.g.

Do you love your island ...

- ... get informed in your civic amenity site on **20. June 2007**
- ... 60% of our waste can be recycled
- ... electricity for 30.000 household can be generated out of waste

Activities related to such information Days/Open Days can be prolonged and extended by Information Stands at the plants itself or in municipal administration offices near the plants. The experience of such Information Stands can also be used to use this tool in preparation of new plants. By informing the public and especially the resident public very early reduces problems during the public hearing (and in the next years more and more upcoming environmental information duties).

Open days, Information Days and Information Stands should go hand in hand with an Information Telephone (which is online the whole year and not only on Information

days), where people can get general information about waste and about the open Days in detail.

Last but not least successful Information Days/Open Days/Information Stands can be used for advertisement about themselves – e.g. We love our island ...
... we informed more than 100.000 interested people about the xy plant

3.6. Materials for schools and students

This part is very important because pupils have the most important influence on their parents and so they are opinion multipliers. Parents with their shopping habits are the 'producers' of household waste. E.g. when children influence them only to use paper bags instead of plastic bags for transporting the goods this is a first step in the direction of recycling (paper) and waste reduction (plastics). Similar activities can be extended to a lot of daily goods (reusable bottles, etc.) and to separated collection of household waste.

Other possible future initiatives in this area could be information of school teachers or the preparation of tools for schools. For the target group children games/online games are very interesting and useful. Beside this virtual world also the reality will impress children very much, so visits directly on the sites will be useful and so we are back at point 3.5 – in case of children the information days should meet the educational level of the different schools/ages of the children.

Also the entering test for Maltese pupils which will go to university can be concentrated on the issue waste (for example with the incentive of an award). So, by setting such a hotspot, within one year all environmental ideas of the youth will be written down and can be analysed easily.

The information material can also be combined with the suggestions of the curriculum of the so called eco classes and environmental engineers.²³

²³ More about that already in Chapter 2.1

4. Further areas of using the slogan

4.1. For best practice of the administration

We love our island ...

... we spend *20m Lm* for waste collection

... we produce *100 MWh* electricity out of waste

... we clean *2.000.000* litre sewage a day

... we keep the special EU-directives

... we build up one new waste treatment plant instead of 2 new ones

... and reduce emission by *85%* and create establish create a holistic solution

... we employ *250* street sweepers

... we saved ... recourses by optimizes public procurement

(also the a recycling and waste reduction orientated public procurement can be used for best practice)

4.2. For giving recommendations to the public

Do you love your island ...

... do not litter waste in the nature

collected PET bottles can be 100% recycled

recycling reduces 80% use of raw material and energy

reduces cost of additional street cleaning

... separate waste

do not avoid recycling

save costs for waste collection and treatment

beware of waste collection fees

obtain the EU-packaging directive
waste to energy rises Maltese energy import independence

4.3. Additional issues under this slogan

Do you love your island ...

... reduce air emissions by using your bicycle

safe energy

healthy activity and/or reduce overweight

less traffic jam

reduction of CO₂

more oil independency

... keep your water clean

... safe energy

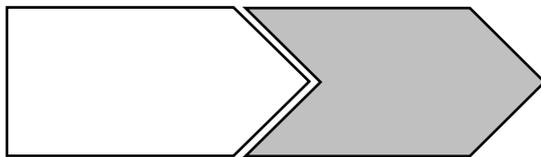
5. Time table & Costs

Phase I; Teaser



Activity Start of teaser	Week									costs
	0	1	2	3	4	5	6	7	8	
MRAE web-site teaser	█	█	█	█	█	█	█	█	█	"manpower"
TV spot (5 seconds)	█									
Radio spots (5 seconds)	█	█								
billboards		█	█	█			█	█		
newspaper advertisement (small)	█	█								

Phase II, best practice



Activity Best Practice	Week									costs
	9	10	11	12	13	14	15	16	17	
Press conference, press release	█									
MRAE web-site facts & information	█	█	█	█	█	█	█	█	█	"manpower"
TV spot (10 seconds)	█	█								
Radio spots (10 seconds)	█	█						█		
billboards		█	█	█						
newspaper advertisement (medium size)	█	█								

Elections

Phase III, Recommendations



Activity Recommendations	Week									costs
	18	19	20	21	22	23	24	25	...	
MRAE web-site FAQs, detailed content										"manpower"
TV spot (15 seconds)										
Folders, flyers, leaflets, stickers										
newspaper advertisement (medium size)										
on-site activities, open days										"manpower"
Materials for schools										

For better orientation the possible prizes of different activities are about²⁴:

One second TV-spot has an average cost of about EUR 200, so a teaser spot comes to EUR 1.000 and a full spot during the later phases makes up for about EUR 1.500. Radio activities are much cheaper than TV, so comparable prizes are about EUR 60 per second. As radio is only needed for phase I and II the prize is EUR 300 to 600. In the case of newspapers it might be most difficult to compare prices between Austria and Malta but it starts at about EUR 700 (small announces) and goes up to EUR 15.000 for full pages. For leaflets, brochures and folders it is always important to include the distribution costs – this is the most forgotten position by calculating this media – the production cost (without the creative part of finding the idea and creating the design – about EUR 1000 – 2000) are rather low at about EUR 0.50 to 1.

In the figures above “manpower” means that most of the efforts are not monetary but work intensive investments – this is true for is in Public Relation is in general and in opposite to advertisement.

6. Evaluation

In this concept a holistic and long term component of Public Relation is foreseen. The aim should be to build up a trustful and honest relationship with the general public and especially the interested public. Such an aim could only be approached step by

²⁴ Prizes from Austria; detailed Maltese prizes are available at media agencies in Malta.

step. On the way to reach this aim it is necessary and important to check the effectiveness of the single steps (and by checking the single steps at the same time the campaign over all).

Beside this such an evaluation should be done in every campaign or activity as soon as the cost-effectiveness-relationship fulfilled (mainly depends on the budget of the activity).²⁵

Evaluation is an often used term and nearly as often as it is used it is misunderstood or a term without meaning. To come to a common sense it should be defined: Evaluation means to generate indicators for steering the effects or the direction of a campaign (or if everything works as estimated to set optimization by fine tuning). So for the evaluation it is necessary to transfer soft skills of a PR-campaign into facts and indicators which are measurable. That means that hard facts are needed and hard facts are mainly figures and facts. Statements about a campaign like 'nice', 'impressive', 'shocking' etc. cannot be measured. But, for example the number of visitors on an Open Day at a plant could be measured (and could be compared to the number of visitors on other places). Comparing these figures and the parallel ongoing PR-activities to that Open Days an indicator for the effectiveness of the campaign is set. More about that in chapter Evaluation of Open Days.

So in the following for all recommended activities of the "Do you love your island ..." campaign evaluation instruments, tools or activities should be developed.

6.1. Evaluation of Press conference and Press Release

Every press conference is held to get public attention. But which press conference is more successful than others? Parallel to that every press release is send out to find consideration in the daily news (otherwise the effort to write a press release does not make sense), but again which press release is successful?

²⁵ The analyses of the current situation at the beginning of the Twinning Project showed us, that a lot of good information and PR activities are set into action by the Maltese authorities. Nevertheless an evaluation lack is still existing. This is comparable to the press clipping which is done in MRAE and Watseserv, where all articles about environmental topics are collected, but for example trend analysing does not take place. (That the press clipping is already existing was the reason, why this part of the Twinning Project was not handled further more/again)

And as soon as we know which press conferences or which press releases are more successful than other, we ask ourselves why?

To evaluate media work as press conference/press release the number of newspapers (or media) could be counted, e.g. 50% of all Maltese newspapers are reporting about the outcome of the press conference. This is a first rather rough approach, because 50% could mean that only the smallest newspapers with the lowest circulation are writing about this topic. Therefore also the circulation (and so the number of potential readers) should be taken into account. In that way we can say that e.g. *Press Conference A* had 200.000 potential readers but *Press Conference B* had only 30.000. Knowing that figures content and preparation of both press conferences could be compared and so it is possible to find out which activities have more media impact. The same methodology can be used for the news in the different TV-Channels, magazines or internet newspapers. By using this kind of evaluation systematically media work can be improved and ineffective activities can be eliminated.

6.2. Evaluation of Internet

Internet is a technical driven instrument and so also the evaluation is technical driven. Close to every software for developing internet-sites (CRM-system; Content relationship management system) includes analyzing tools. So it is possible to find out how often a banner was clicked, how often people followed the links of the banner and for how long they have been on the information site. Beside this it is also possible to analyze which sites these persons read before and to which site they are going after visiting the information site. So for example possible information lacks could be detected or the comparison between more and less clicked banners can improve the development of successful banners.

By analyzing the traffic of the whole website of the MRAE it is possible to place the banners on very popular places and rise awareness in that way.

6.3. Evaluation of TV Shows

Agenda setting via co-operation with TV-Shows is very difficult (but highly effective) and might not happen so often. So it is also a statistical problem to find valid indicators for evaluation. Nevertheless it should be documented which activities are set to support TV-productions and which of these activities had been successful. As mentioned before it is necessary to be aware that a small number of activities does not automatically lead to successful analyses! Beside this mathematical problem the same methodology can be used as it is described in the evaluation of press conferences.

6.4. Evaluation of Brochures

The evaluation of brochures are easy if a response element is used. Such a response element can be an Information Telephone (which is mentioned under chapter 6.7) or an announcement of an Open Days took place.

If the brochure is 'only' for information purpose and not combined with other activities (which can be used to create indirect evaluation indicators as mentioned above) evaluation indicators could be created via the aim of the brochure. E.g. it is a brochure about waste separation the separation rates before and after the campaign can be compared.

6.5. Evaluation of Information Days and Open Days

The easiest way to evaluate Information Days or Open Days is head counting. How many people participated in such an event?

To get more detailed information about the success of Information Days or Open Days the visitors itself must be 'interviewed'. This could either be handled in a very direct way: Employees at the site of the event are waking around and ask people to fill in an survey or the evaluation can be done in a 'hidden' way. This does not mean that such an evaluation is something mysterious or mystic, but in open survey it is difficult to catch all target groups (some people do not like to give to much answers in interview situations...). So for example if there is a car parking beside the plant which

runs an Open Day it is possible to count, where the visitors come from. It is also possible to catalogue the most asked questions at the Information Points (this method is described in detail in the chapter of the Information Telephone (there also CATI is included, which hardly could be used on a site).

In case of Open Days/Information Days it is very important to train the staff very well. Otherwise they will always make the so called “*fist aid man-question*” mistake. That funny but symptomatic term means that visitors are always asked: ‘Can I help you’ ... To intent an effective conversation it is necessary to asked structured questions as: ‘Could you imagine how much emissions will be produced by treating your yearly household waste?’. In that way a discussion can be started an the key message (e.g. no dangerous emissions) can be transported.

6.6. Evaluation of Material for Schools and Students

Supporting Schools and Students is a long term activity. So also the effects will be measurable only after a longer period. This makes the evaluation much more difficult. Nevertheless it is necessary to run such activities not without any control tools. One of these tools is to check the knowledge of pupils one year after implementing some environmental lectures. As an alternative it is also possible to make yearly contests about environmental innovations. The quality of the output can be compared year by year. So an indirect indicator for the evaluation of the work with Schools and Universities is generated.

6.7. Evaluation of Information Telephone

When an Information Telephone number is offered there is not only the (very easy) possibility to count the number of calls. Beside this it is also possible to identify the area where the call comes from (via the prefix). So it is possible if for example calls on the Information Telephone for the St. Antnin plant are only from the area of St. Antnin, form additional specific areas or from all over the island. This knowledge is an important input for effective PR-activities! If close to all calls are from the same area it is possible and necessary to concentrate the PR-work on that area and do not waste money and effort on other – in that case insignificant – areas. Otherwise it could be

an indicator to enlarge a local limited campaign to other areas if the analyses of the Information Telephone indicates these signals.

Additional to that first 'geographic' identification of recipients also content analyses are possible. If people ask something on an Information Telephone of course it is not possible to analyze the spoken word, but if the content is catalogued to key words, this keywords can be (computer) analyzed. If for example a Information Telephone is installed for a possible thermal treatment plant some of these categories could be: Emissions, hazardous substances, transport of waste to and from the plant, treatment of the ashes, etc. Such a catalog can be prepared before the line of the Information Telephone is open, because 80-90% of the topics could be estimated. Additional to that new, significant often requested/asked topics could be added during operation of the telephone.

Both, the geographic analyses and the content analyses, are helpful hints to set hotspots in Public Relation Work. To come back to the above mentioned example the result could be: People living in the surrounding areas should be informed about the emissions, and people who live more than 5 kilometers away have the need to get information about the traffic situation (waste transport).

Also the source where people picked up the number of the Information Telephone is important for the analyses. It could be asked at the end of the call – comparable to the categorization of content the possible answers are prepared (it is very easy to develop this catalog because all possible contact point should be clear: all places and media where the number of the Information Telephone is published and additional the face to face interaction).

For Information Telephones (as for telephone surveys) as technical devices are available as the so called CATI (*Computer Added Telephone Interview*). By using that supporting tool the person on the Information Telephone can process the cataloged topics directly on a computer while answering the questions of the calling person (and so the results are ad hoc available).

7. Keywords

Added value: Advantage in comparison to other competitors. Most effective when it is not possible to copy it (e.g. diving resorts, regional heritage, ...)

Advertisement: Short time orientated activities to reach a specific aim (mostly to rise turnovers of products). To transport it via the media the advertisement has to be paid.

Branding: To bring specific images in direct connection with the product (will also work with a slogan for a campaign). So for example the branding of Adidas are the three stripes, the Branding of Ferrari are sport cars (mainly in the typical red colour) or the branding of Hawaii is luxury holidays under palms on a white sanded beach.

Brochure: Information paper with more than one side (folded; therefore also often called folder), content more detailed than on a leaflet (following the idea of the information pyramid), optimum for production 4 or 8 sides (no blended paper)

Early adopters: Companies or persons who are recognising new developments and trends very early and generate profit (monetary but also immaterially) out of this advantage in competition (comparable with: early birds).

Impact: The factor of influence a campaign has. For example the change of percentage of waste separation after a waste separation campaign. (see/compare also recognition)

Information pyramid: the idea to start information from a very general and easy understandable level and to go more and more into details (step by step as you can see it in newspapers; short headline (4-max.10 Words, big letters), longer sub-headline (up to 30 words, mid-size letters), long text/content (related to the issue but at least 2-3 times longer than sub-headline, normal letters).

Leaflet: Information paper, one side, easy understandable content which people can recipient within a few moments (↔ brochure)

Opinion Leaders: People who are asked about certain issues where a 'public' opinion building has not taken place yet. If enough opinion leaders express similar opinions an issue can get a spin (see: spin).

Opinion Multipliers: Persons, who are able to influence others by standing in for their own opinion. So others will adopt this opinion and stand in for it as if it would have been their own opinion.

PR; Public Relation: Long term orientated information work by using the vehicle media to reach the public, or part of the public (see target groups). To transport it via media PR has to give good information to the journalists.

(Press) Clipping: Collection and systematic of relevant published information in media (Press, TV, Radio, Internet, ...)

Recognition: The second important measurement in running a campaign, the percentage of people who can remember a campaign - or parts of it (see/compare also impact).

Response element: A response element is the vehicle to offer interactive participation of the target group, e.g. the flyer includes a coupon to participate in a quiz – so the runner of a campaign gets names/addresses/etc. of interested persons and could refine the activities of the campaign to that sub-group of the target group.

Spin: If a topic which has no specific image is softly pushed into a certain direction.

Spin doctor: A person (PR worker) who picks up an issue and tries to give the issue a certain image (or a certain twist (spin) into the direction of an image). If people can be persuaded by these activities, that soft spin can be the trigger of a large eruption.

Tangibilisation: Visualisation of services or activities which people will normally not notice.

Target Group: A group of persons with similar socio-demographic background, interests, living areas, etc. Because of one or more similarities this group is more susceptible for the same messages.

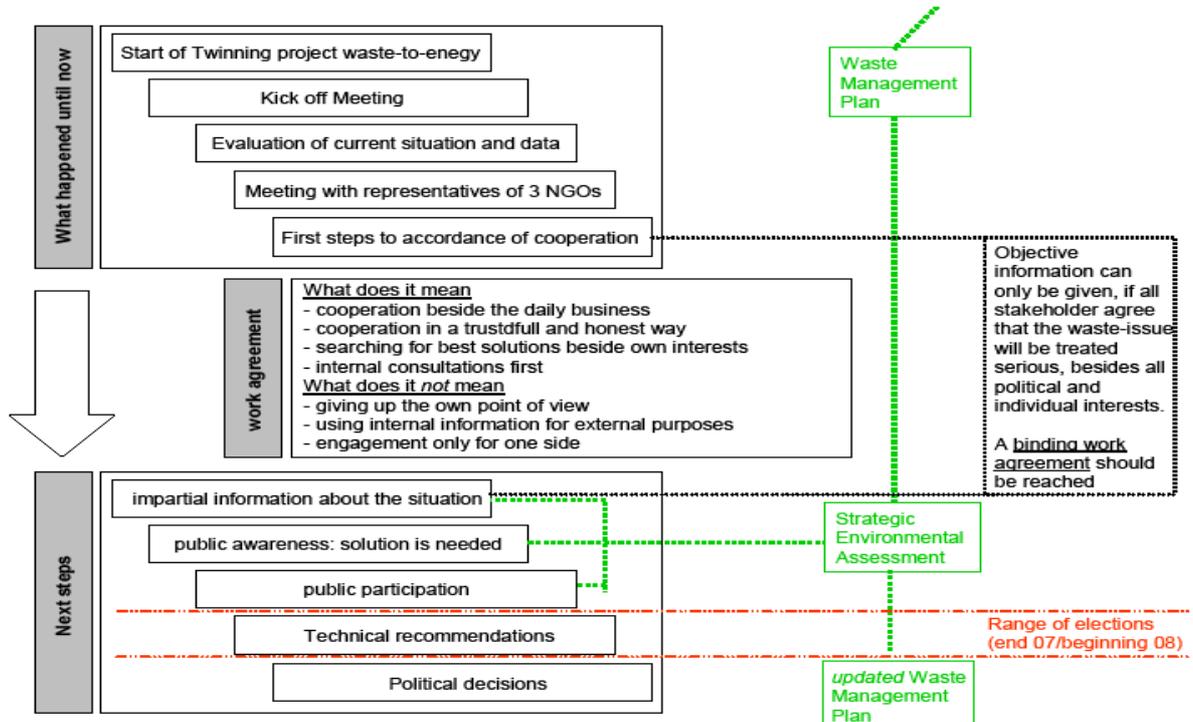
Teaser Campaign: A specific type of (advertising or PR) campaign which is not self explaining at the beginning. Normally a TV-Spot shows the product or service it

should sell. In case of a teaser at the beginning there is a question or a keyword without an answer for the moment. So the impact should be strengthened.

Testimonial: A person, who is trying something and tells the public about its experience (in advertisement mostly positive experience)

8. Annex I

Picture which shows the possible timing: in that case it was developed at the beginning of the Twinning Project for the publication of the update of the Strategic Waste Management Plan:



Part B

- Foreword 2
- 1. Construction and Demolition Waste 2
- 2. Aims of the campaign 2
 - 2.1. Waste ‘principles’ 3
 - 2.2. Situation Analysis (in brief)..... 4
 - 2.3. Sources of C&D Waste 5
- 3. The Target Groups 6
 - 3.1. The C & D Industry..... 6
 - 3.2. Applicants 7
 - 3.3. Competent Authorities..... 7
 - 3.4. Citizens 8
- 4. Media and Channels to disseminate information 11
 - 4.1. Distribution via MEPA 12
 - 4.2. Reference to Phase II & III of the Waste to Energy Campaign 13
- 5. Media and Tools 14
 - 5.1. Press conferences and press releases 14
 - 5.2. Website 14
 - 5.3. Guidelines and Brochures 14
 - 5.4. Information days and Open Days (information stands) 15
- 6. Incentives 16
 - 4.1 Unused residence fees (or speculation tax) 16
 - 4.2 Awareness of advantages to refill quarries 17
 - 4.3 Charts of sustainable architects and constructors..... 19

Foreword

During the Twinning Project MT05-IB-EN-01 “Assistance to explore long-term projects to manage specific waste streams in a more sustainable manner” the topics Waste to Energy and Construction & Demolition Waste (short: C&D Waste) should be handled. The technical parts were divided into two components, while the communication activities for both topics were sub-summarised under one component.

From the point of view of communication science one larger campaign with different topics under one “identity umbrella” will generate more impact than two smaller campaigns with two different brandings. So the first intuition for the Waste to Energy and C&D Waste campaign was, to bring both together. As it will be shown in this concept for C&D Waste this was not possible through many reasons. Nevertheless as often as possible references to the Waste to Energy-campaign were given.

1. Construction and Demolition Waste

Construction and demolition waste is defined as waste which arises from construction, renovation and demolition of buildings. Surplus and damaged products, materials arising in the course of construction work or materials used temporarily during the course of on-site activities are also included in this definition.¹

C&D-Waste in Malta makes up for at least 1.8 million tonnes per year. This amount includes reconstruction material as well as excavation material. So the construction industry is the main waste generating sector and accounts to about 88% of the whole waste amount.

2. Aims of the campaign

The main target group is the construction industry in the broadest approach, starting with producers of building materials and ending with demolition companies. Of course every company has to act under economical circumstances. Therefore a demand for sustainable acting in the field of construction and reconstruction must be

¹ European Waste Catalogue EWC; Chapter 17.

generated by the public (especially the customers). So the objective of having an informed, responsive, participating and demanding public would be a significant way towards achieving the goals of reducing the environmental impact by construction, reconstruction and demolition activities.

Beside the communication activities it is important to aim that modern waste management policy must take eco-cycles into account and regard today's waste as tomorrow's raw materials². And last but not least this approach leads into the already mentioned integrated sustainable acting. The term 'sustainable' is generally understood to mean development pursued in a manner that, in meeting present needs, does not compromise the ability of future generations to meet their own needs. Sustainable waste management means using resources more efficiently, reducing the amount of waste we produce and, where waste is generated, dealing with it in a way that will help to achieve the goal of sustainable development. Nevertheless this also takes into account to be in a balance between the proximity principle and economy.

2.1. Waste 'principles'

Again, as in all other activities related to waste the same principles should be taken into account. But before coming back to the "Polluter pays Principle" at least the equal or maybe more important "waste hierarchy" should be mentioned. However not the 25 years old concept consisting of the 5 steps (1. prevention/reduction (including downsizing the amount and/or danger of hazardous waste, 2. reuse, 3. Recycling of materials, 4. recovering by composting and/or energy recovery, 5. disposal of waste, if there is any other possibility of using/reusing/recovery/recycling) should be repeated. Furthermore a concept which is related to C&D wastes should be discussed in the following: The circle of waste.

Construction and reconstruction material is raw material which has been excavated out from quarries – nearly to 100% from the Maltese islands. This material will be used in the building industry. After the materials have been used in a building or

² As the world economy is increasing at the moment the prices of raw materials are rising. So everybody is aware to reduce the need of that valuable resources. Nevertheless we should that falling raw material priced change this situation rapidly. Therefore a C&D campaign should also target sustainable goals.

construction, in a rebuilding, renovation or demolition process the separated waste can go back to refill the quarries again. So the “life”-circle of this material is closed (Excavation waste will shorten the circle and comes from excavation directly to quarry filling).

Beside this nearly sustainable circle a faultless refilling of quarries can be seen as an **“on-(is)land land reclamation”**.³

This circulation assumes that the construction and demolition waste (including the excavation waste) is separated from other waste. The easiest way of reaching this separation or avoid the mixture with other (dangerous) wastes is to take it into account already in the construction period. By refilling old quarries or parts of still operating quarries the landscape of the Maltese island can be recovered. Beside this also an economical advantage is included in this approach. On the one hand quarry owners could earn money by taking back excavation and inert reconstruction waste to refill the quarry and on the other hand a completely refilled quarry can be developed for estates. So quarry owners have a fixed income for long periods.

2.2. Situation Analysis (in brief)

Analysing the C&D-Waste brings up four specific in Maltese situations:

- Low prices of raw material and for dumping used material (at the moment no polluter pays principle has any steering effects)
- Architecture of houses (Nearly every house is built up with blocks of softstone. This gives Malta a very specific heritage, but also brings the problems in case of re-construction)
- Change of legislative circumstances (The allowance to build deeper cellars and higher buildings led into a boom situation of old-house demolition and building up new houses)

³ More about that in the concept of Mr. Willing “Documentation and recommendation for C&D Waste recycling and disposal for Malta”, also developed during the Twinning Project. Especially the target group owners of quarries should be informed, that a filling of their quarries can already take place while they are still using excavation in other parts of the quarry. So the possibility to earn double money should be spoken out – but not without insisting of a technical and environmental correct way (areas should be re-buildable after they are completely closed).

2.3. Sources of C&D Waste

To get an impression about the possible sources and producers of Construction and Demolition Waste the following small table should give a brief overview:⁴

New construction sites

- Excavation (contaminated soil should be collected and treated separately)
- construction waste (stones/bricks, wood, cuttings...)
- packaging materials (plastics, glass, metal, paper)

Renovation sites

- stones/bricks (with hazardous substances e.g. colours, contaminated stones/bricks should be collected separately)
- concrete/reinforced concrete
- debris, ceramic, tile polishing,
- construction waste (bricks, wood, cuttings...)
- bulky waste
- packaging materials (metal, glass, plastics, paper)

Demolition sites

- stones/bricks (with hazardous substances e.g. colours, contaminated stones/bricks should be collected separately)
- concrete/reinforced concrete
- debris, ceramic, tile polishing
- bulky waste
- wood (with hazardous substances contaminated wood should be collected separately)

Hazardous waste streams

- solvent
- contaminated packaging materials
- glue
- contaminated excavated soil, wood, stones/bricks ...

Hazardous waste should be collected separately for a special treatment. Therefore the stakeholders should be informed which materials are dangerous and why it is so important to give them a special attention.

⁴ For more detailed information again the reference to the papers developed by the technical working groups within this Twinning Project.

Avoidable waste streams

- colours with high concentration/contamination of dangerous substances
- materials with high concentration/contamination of dangerous substances

3. The Target Groups

For an efficient communication to succeed it is necessary to address the “right recipients” and at the same time give out the “right message”. By addressing more than a handful of people it is not possible to contact every single individual with a personalized message. So the use of mass media it is inevitable. For handling that, a short explanation from the field of communication theory is very helpful, because in this theory people are divided into groups. These groups are the so-called target groups, where persons with similar interests and/or behaviour, social/cultural/educational background are subsumed. Members of the same target group could be more precisely be addressed and reached with identical messages and via the same media than mixed groups of people. So for example people who are interested to build a new house in the near future will – very likely – read architecture magazines.

In case of C&D waste the number of possible target groups is rather small. So the interests of these target groups could be met very precisely.

3.1. The C&D Industry

Under C&D industry the following groups are sub-surmised: Owner of treatment plants, collectors, demolition companies, craftsman, construction supervision, architects, designer and developer, producer of building materials, importers, Building Industry Consultative Committee (BICC), site managers, quarry owners.

All acting groups should not only follow economic maximisation, but they should also be aware of ecosystems and sustainable acting. By acting in that way the public will accept that not only constructing in the cheapest way is the best way and slightly increasing prices because of biological treated building material might be accepted (as people are willing to spend more money for a healthier environment).

For strengthening a biological approach in the construction industry an association can be installed. This association can also include the recycling efforts. For example a label for developers, architects and construction companies can be developed, which marks all “green” companies. Projects which fulfil these criteria could be presented on the website. So acting in that way will become an advantage in competition.

Guidelines should be developed like a handbook for experts and an information brochure for the public and innovation processes could be promoted by different competitions.

Last but not least also legislative step should be set to increase reusable material or recycled materials. For this two different scenarios are possible: On the one hand a industry which is aware of the issue and starts to develop guidelines by themselves including limits and ‘self-obligations’ (mostly the preferred way because in that way limits might be a good compromise for the industry) or on the other hand obligations and limits by law. Last but not least it must be mentioned that politics has to generate the necessary pressure to all parties in this process.

3.2. Applicants

On the one side the industry is the producer of C&D Waste, but on the other side the applicants are generating the demand. This target group has the most important influence on the industry and the way industry is going to construct new buildings (the demolition waste of the future) and reconstruct the old buildings. Especially this target group should be aware of their acting.

3.3. Competent Authorities

The competent authority should not be only a supervision; it should be a helpful partner, which supports all interested persons with information and the professionals with information about their obligations. In the situation of Malta the MEPA might be the central information point. Additional distribution points for that information could be the local councils, which are closer to the needs of the citizens. More about that you will find in chapter distribution via MEPA.

3.4. Citizens

In case of construction and demolition waste the citizens are target groups for long term strategies. On the one hand every citizen could be an applicant of tomorrow and on the other hand during restoration of existing buildings a lot of problems for the future could be avoided. Beside this e.g. biological materials can reduce the harmful substance impact to their daily life.

E.g. to make people aware to use/request sustainable building materials. Public should be informed how the main waste stream is treated and what happens with these collected and treated waste streams (sustainable development). Furthermore citizens should be informed how they get rid of their C&D waste (mainly in refer to renovation) in a regulated way.

As education plays a central role in the public awareness - in a direct and indirect way – this topic should be treated in a separate chapter in the following:

3.4.1. Teaching waste management and recycling technologies

Education about Construction & Demolition Waste is one of the most important points. It is a mixture between targeting a specific group of citizen (Children, pupils, students, teachers) and using a communication channel. Therefore this topic is handled in a specific sub-chapter of the citizen chapter.

Overall four different target groups can be identified:

- Kindergartens, preschools and primary schools
- secondary schools and higher schools
- Universities
- Competent Authorities

Kindergartens, preschools and primary schools:

For children and pupils it is important to explain the way of construction and demolition waste in a very easy way so that they can understand what happens with the old buildings and what is necessary to build a new one. By the way children should learn as soon as possible that the resources (of softstone, etc.) are limited. So their readiness for act in a sustainable way will be higher than in former generations.

The easiest way to reach children and pupils is to pack the content into simple operable games, exciting books. Creative contests can be held, for example painting contests and additionally the output can be used for exhibitions about the topic waste.

As – especially children – are learning with all their senses (see, hear, touch, smell) short films with additional exhibition material could be prepared.

The overall aim is to sensitize children to environmental issues and in that specific case to sensitize to C&D Waste and to make them curious about the things which are going on: So they will start thinking about that topic and last but not least they take these ideas to their homes and will 'educate' their parents.

Secondary Schools and higher schools

Set up on the content which was instructed in the years before more complex contexts could be transferred in Secondary Schools. Pupils could work out their first own ideas and effects of activities could be simulated via computer programs. Especially by these simulations effects of measures but also effects of not set measures could be illustrated.

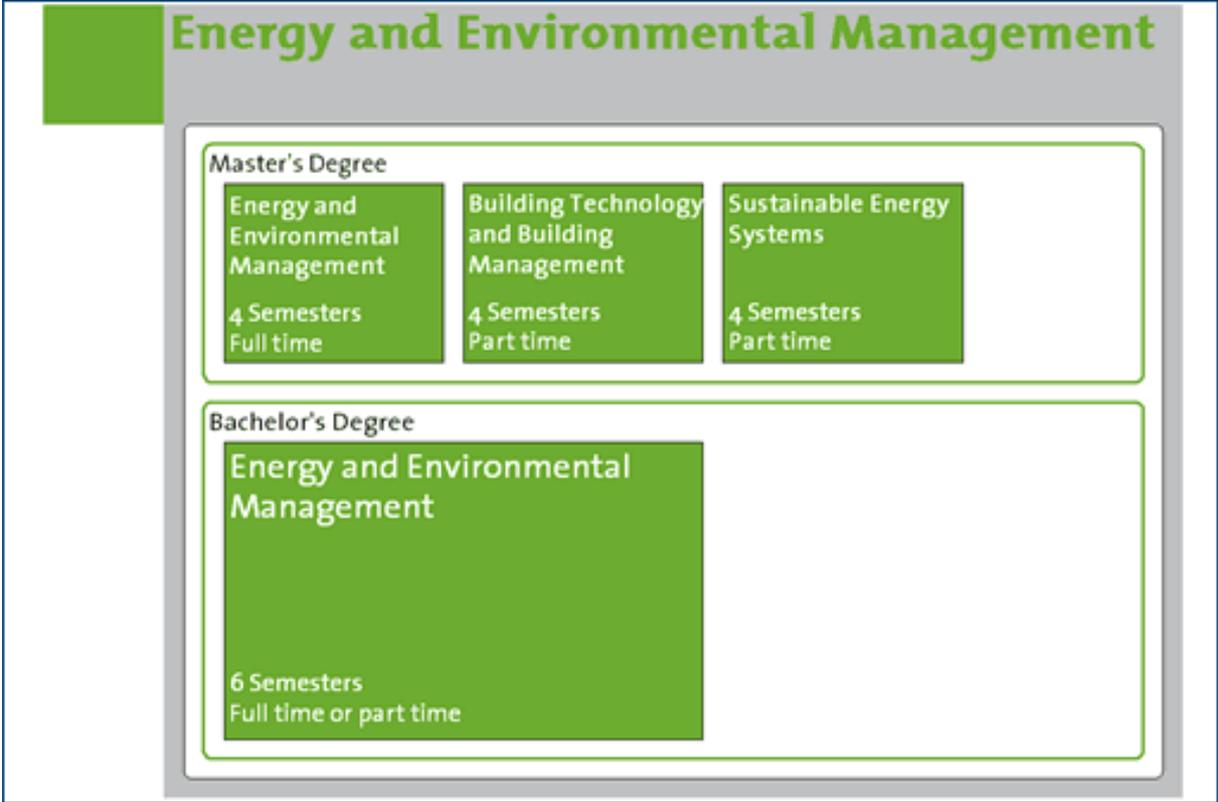
For such higher sophisticated lessons teacher must be educated. Special training programs for teachers should be developed. For example packages for teacher can include brochures which should be worked out by the pupils. Again – as for the kindergartens – film material can be provided. Such supporting teaching materials could be combined with excursions to plants, quarries and building sites. So theory and practice will achieve learning synergies. Like a red line through all educational levels contest could be held.

The aims in secondary schools are quite similar to the aims of primary schools: awareness raising. Additionally to potential students should be animated to think about a possible career as an environmental engineer if they are willing to study environmental technologies.

Universities

A special curriculum about sustainable construction could be established at the Malta University. So for example Austria set a lot of activities in clean environmental techniques in the early 80ies and had a enormous advantage in the world wide

competition in the sector of environmental techniques for at least 10 to 15 years. The export of such techniques became a noticeable factor in the Austrian economy. Comparable to the Austrian efforts Malta could achieve such an advantage in building industry specialised on heritage building out of softstone or can occupy a similar niche. A possible frame for a curriculum could be (an emphasise on recycling has to be implemented in one the degrees):



Key areas of study could be environmental management, energy and recycling (especially energy in relation to recycling and raw materials), environment at all (water / air / soil / waste), applied recycling technologies, applied recycling economics), implementation and transformation technologies, business economics, law, building technology, technical building equipment, process management, construction sites management, control and communications technologies.

These activities will support and promote research activities in the fields of C&D waste to find new innovative solutions on the one hand and on the other to make people aware of the problem, the activities in this area and also the knowledge (Research example: How to create/use C&D - recycling material instead of dumping)

Beside this studies about the use of recycled materials can be useful to establish a recycling industry in Malta and ensure the economical independence of the island.

To enrich the traditional ways of teaching students also international coryphées in these areas could be invited to held lessons, speeches, conferences or symposiums.

Students can build up a knowledge platform and so the gain of knowledge will speed up like a spiral. Last but not least also the economy of Malta will be in a winning situation by innovative products out of this development (for example in the recycling industry or in use of materials, etc.)

By offering ecological alternatives also the general public will become more and more aware of sustainability in this sector. This automatically will reduce the C&D waste problems (amounts, separation, hazard).

Only well trained and educated engineers and architects will make it possible to optimize the use of material and so reduce the need of material, will make it possible to accept and use recycled material and so to reduce the costs and the environmental impact.

3.4.2. Profession Project Waste Manager

Beside all the recommendations for the educational sector also a new profession could be intend, a “project waste manager”. By obligatory project waste management plans a reliable person within the planning/design/contracting team is requested. This person must be technically competent and appropriately trained and takes the responsibility to ensure that the objectives and measures within the project waste management plan are delivered and who is assigned the requisite the authority to secure achievement of this purpose.

4. Media and Channels to disseminate information

As the target groups could be defined very precisely also the media and channels could be defined very precisely as far as it is not already mentioned in connection together with the target groups (so only additional or specific topic are mentioned in this chapter).

In this specific case of C&D waste an old saying can be used: “Less is more” – less media and channels more preciseness to the target group. For example an architect maybe reads some sports magazine, but surely he will read an architects magazine and beside this he will have a higher degree of concentration (receptivity) on the content in a magazine of his profession. Or as another example, TV-spots will reach nearly everyone in Malta, but a lot of this resource will be wasted because only a few hundreds or thousands of the population are in a house construction or renovation process.

Because of these rather limited possibilities to reach the different target groups the reduction ton brochures, folders and leaflets is recommended.

Also the right channel will be the key to success. Therefore the possible contact point with the target group are interesting for distributing information via the mentioned folders, brochures and leaflets.

4.1. Distribution via MEPA

MEPA will be in contact with every applicant. So this is a very important distribution channel. Either MEPA will be supported with information material or they create the material by themselves.

With the permission for construction and reconstruction activities and measures the authority should inform and support the applicants with information folders. These guidelines for the different applicants guarantee collecting and treatment which is regulated, united and conform to legislation of demolition and construction waste. Available guidelines (additional available in internet and paper versions at the city council) should be adopted on the local and regional situation of Malta.

The different folders should aim at an integrated approach to waste management and that includes the raising of recycling rates, the reductions of landfill volume and the saving of resources.

Especially the long term aim of this campaign could be integrated in the recommended so called “*Do you love your island*”⁵-campaign. Parts of the design should be used again to use and refresh recognition and so higher impact rates and the minimisation of costs can be realized. Accompanying guidelines should also include best practice examples.

4.2. Reference to Phase II & III of the Waste to Energy Campaign

The Waste to Energy campaign, which is the second PR part of the twinning project is based on a broad approach and should open a lot of interfaces for other campaigns or parts of campaigns. So also content from C&D Waste can be transported via the ‘*Do you love your island ...*’⁶ campaign.

The Waste to Energy campaign starts with a teaser phase. After teasing and creating the brand “*Do you love your island*” in three steps it might be possible to implement activities of C&D Waste in phase II and phase III.

In phase II the teaser “mystery” turns into a best practice information campaign (more about the details in the Waste to Energy concept) and also best practice examples from C&D could be used.

We love our island ...
... the XY quarry was refilled and a park will be developed at that place.
... 90% of the investment is out of saved money by refilling with inert waste

The third phase – after the slogan has already a positive image/positive spin it might also be used to give recommendations to the public. These recommendations are not necessarily only reduced to W2E-topics. As far as the other activities do not ‘damage’ the brand of the campaign it is possible and also desirable to use it. For example

Do you love your island ...?
Reduce waste, follow the recommendations of sustainable reconstruction
More details at www.MRAE.mt

⁵ The mentioned campaign is parallel developed in the Twinning Project and runs so far under the working title “*Do you love your island ...*” and is created as a teaser campaign (a kind of campaign which makes people interested by a first step in not giving the answer for a promoted slogan).

⁶ As it is mentioned in the Waste to Energy-Concept the title “*do you love your island*” is only a working title. To keep it stringent this working title as a synonym might also be used for the references to the other concept.

Do you love your island ...?

Use recycled materials for restoration of your building

15% cheaper, 20% more energy efficient in producing, 75% less use of raw materials

More details: www.MRAE.gov.mt

The slogan could also be used for the recommended guidelines brochures and folders. The more often the slogan is used the better the recognition data are.

5. Media and Tools

5.1. Press conferences and press releases

These are classical tools to inform the journalists about something which is worth to be written in newspapers or sent on radio, TV. For example the first house which is complete build up with recycled material could be such a topic.

5.2. Website

The website is a fast and cheap tool to provide different target groups with information. For the professionals all relevant laws, directives could be published – maybe also with comments to the text.

For the general public easy understandable content could be provided. So they can get informed before they are planning to rebuild a house or consult an architect. Also the well known **FAQs** (*f*requently *a*sksed *q*uestions) could be used to give helpful information and can be specified for the different target groups.

5.3. Guidelines and Brochures

Guidelines and brochures may be printed to transport content to the interested public. Stickers: The MRAE itself is a good example for the stickers: Beside every

light switch there is a sticker, which reminds us to switch off the light if it is not needed (as far as I understand the Maltese language), so a similar sticker can also be developed for the C&D waste topic.

Content in keywords for target group *Craftsman, construction supervision, architects, Designer and Developer, producer of building materials, importers, Building Industry Consultative Committee (BICC), site managers*

Handbook how to handle different materials, optimize the use of (building) material related to the quantity and the quality, concept for construction sites and nomination of a responsible person (experience), obligation of waste separation already on the building site (exception for the inner-city areas, where the possibility does not exist to handle four containers)

Content in keywords for target group *collectors and owner of treatment plants, demolition companies*

Handbook how to reconstruct sites in a recycling orientated manner, separated collection of reconstruction waste, documentation of materials (quality, quantity; both should become obligatory)

Content in keywords for target group *citizen*

Internet/Folders/Brochures for citizens (with special content, which is easy readable and understandable, so also people without any technical or environmental knowledge can understand it without any problems.

Innovation contest for students and idea contest for citizen

Content in keywords for target group *MEPA*

How to execute the legislative directive, handling of information and supporter with information, preparing forms related to collection/preparing of data (existing data, forecast), supervision of treatment plants, innovation contest for companies, research institutes and universities

Information about the form of documentation, best practice examples

5.4. Information Days and Open Days (information stands)

Being early adapter in constructing in a sustainable way might be slightly more expensive. So the Ministry could support the first 10 developers in promoting their environmental orientated acting with Information Days/Open Days. So the demand for environment friendly building will be speed up and the 'green' developers might have additional arguments to act in that way.

6. Incentives

Thinking about information material is not the one thing, the impact of that information and change of behaviour can also be supported by other measures. These measures could be on a voluntary basis, but not at all, sometime the pressure of economics is also necessary (including the willingness of politicians to form the future of a country). These activities can also touch areas which are surrounding the C&D waste questions. So for example the high amount of unused residences.

6.1. Unused residence fees (or speculation tax)

It is obvious that in Malta thousands of residences, houses, flats are not used and most of them since many years. The internal valuations are speaking from 290 to 30% of all buildings.

At the same time thousands of new buildings are developed (partly somewhere out of nowhere). In some of these developing areas no infrastructure exists and they are without connection of public transport and so on. So it is evident that not only the destruction of landscape is the only problem, it will be followed by a lot of other problems which are hidden but virulent in that moment.

So a fee for unused building is recommended. Of course not every building could be let or sold within a few days or weeks, but long time non-using should become less attractive.

The model of such a fee could be 2 years after the last inhabitant/company left the building the owner has to start paying a fee (or penalty tax/speculation tax). If nothing changes the fee will rise after 2 years. Afterwards year by year this fee/tax could increase maybe also exponential. Aim of that fee/tax should be, that speculation or playing on time should become unattractive and the inhabitant's density should climb up. Inhabitant's density is one of the more important issues especially for a small island and performed in a good way it reduces the cost of infrastructure and also the environmental impact, but nevertheless it should not reduce life-quality.

The above mentioned issue of inhabitant's density is also a topic in connection with unused construction areas in the inner-city areas. Of course for Malta it is a rather small problem, last but not least it is also one little step forward.⁷

Additional to that an existing regulation does not allow a demolition of a building without rebuilding a new one. So in a lot of buildings are no more useable for living but will not be rebuilt. This might also be a topic which can be handled together with the possible unused residence fee.

6.2. Raw material fee/grant of recycled material

Although it is very unpopular it must be spoken out, that raw material and dumping used material is too cheap in Malta, especially under environmental points of view. So the market for recycled products is still under-developed (there is no economical pressure to do that).

It is one of the obligations of politicians to make decisions with take into account the environmental circumstances, too. So a combination of raw material fees and/or recycled material grant has to be discussed. By developing recycling technologies and reusing material over all it could be a financial balanced model (additional costs on the one side could be recovered by lower prices on the other side), but a large step forward to sustainability.

By setting first initial actions a system which works on its own (price-performance-relationship) could come into beginning and in a market with real costs (including direct/indirect environmental costs) will be regulated by its own. Politicians have to create the circumstances ...

6.3. Awareness of advantages to refill quarries

Keeping the materials already as clean as possible and/or as separate-able as possible during the construction period is one thing, but what to do with that waste after its end-of-lifetime is the other thing (the same counts for excavated soil after its

⁷ Remark: Also in Vienna, which has a lot of undeveloped areas surrounding the city, the issue of using unused construction areas was discussed and handled – also in regard to the infrastructure costs

excavation). Definitely clear is, that landfills are too costly for that materials (sanitary landfills require a lot of technical measures to be safe and without environmental hesitation). To fulfil the circle of C&D raw materials the debris should go back to the quarries to come into a 'material balance'.⁸

Again the situation is a little bit similar to the situation with un-used residences (see paragraph before). It seems that quarry owners are keeping back the capacities of their quarries to increase the price of C&D waste disposals on their land and so they are avoiding refilling and land reclamation.

At the moment it is not sure if the quarry owners are aware of the technical possibilities of refilling. As in former times it happened very often that the ground went down after some years or year by year, this will not happen any more nowadays. That is the reason why a completely new situation comes up, refilled quarries can be used for a numerous things also including construction sites. So the awareness of quarry owners should be risen, that they can earn double money, first in refilling and then in developing the reclaimed land. The incentive to do this could be a state grant for the pilot quarry. Also a guarantee could be given to the quarry owners, that in case of no interested developers the state will buy the land for a fixed price.

After a certain period of observing if the incentive activities are fruitful the strategy could be changed if it does not lead to the estimated aim. After giving them a fair change of voluntarily acting some kind of enforcements must take place. Comparable to the fee of unused residences either a fee can be settled or – more recommended – as it is already said in the Waste Management Strategy 2001 the producer's responsibility should be demanded. If a quarry owner got the permission to "make a whole" into the landscape, the same authority should oblige him to recover this whole again. This could happen either by having a penalty fee for unused quarries or changing the law/permission for unused quarries. In the national interest it must be possible to interfere into an existing contract (as it happens in a lot of European countries).

One of the best arguments for the Ministry is that "on-(is)land land reclamation" is much easier to handle than the off-shore land reclamation. Finally the off-shore land

⁸ As it is already mentioned in an earlier chapter of the concept.

reclamation includes a lot off risks and technical challenges. And last but not least the expenses for off-shore land reclamation is much higher that using the on-(is)land recourses.⁹

Slogan: "on-(is)land land reclamation" is easy, cheap and sustainable.

6.4. Charts of sustainable architects and constructors

The target group architects and constructors are the most important drivers in the field of C&D Waste. The biggest expenditure should be done on those persons/companies.

Offer a seminar about "how to prevent complicate or unmanageable C&D waste". To pass the seminar a test can be implemented. The incentive to the architects and constructors can be the follow up of that seminar: Very publicity effective a list of architects, who passed this seminar, will be published on the website of the Ministry. Further on a label for "Certified Green Architects and Constructors" can be developed. The label tell the customers, that this architect/constructor handles under the ethic principles to reduce the environmental impact and will use exclusively harmless raw materials, preparations and ingredients complement (which do not harm the health).

The first target group for such a certified architect/constructor respective his product a building, a residence or a flat are young families or couples who are planning a family – because no parents will risk that their child might get ill by crawling on the floor scratching on a wall or breathing vapour (aerosols) from the building. Possible distribution channels for information material about that label/certification: toyshops, kindergarten, residence sellers, do-it-yourself markets/home depot markets, architects/constructors, doctor's office (specialised on allergic patients), special shops for people how are allergic (food, clothes, etc.), NGO offices.

⁹ Beside the fact that on-land land reclamation is cheaper, technical easier, tested and already uncountable times set into practice also the infrastructure is easier to handle and daily costs are less.

7. Implementation Plan

The main driver in Public Relations activities in the area of C&D Waste are handbooks, guidelines and brochures. So the implementation is much easier than in the teaser campaign suggested in the waste to Energy part of the project (although possible references were given during the concept above). The reduction to brochures, handbooks and guidelines will reduce the lost of resources by hitting wrong target groups.

Overall the activities must be coordinated so that a printed guideline is also available via internet or the other way round, no announced information is not available beside this a step by step production of guidelines after a ranking of the most important and mostly requested topics is recommended.