



GREEN 4 LIFE MANUAL

Coordination:

Carmen Molina Navarro. Asociación Columbares

Authors:

- © Alnoubani, Ahmad Ali. East & WE Center for Human Resources Development.
- © Benlloch Tamborero, Víctor.
- © Bueno González, Ester. Centro Nacional de Educación Ambiental.
- © Chayet, Hamid. Bassin Guir Association for Development and Protection of the Environment.
- © Elkarz, Jamila. Bassin Guir Association for Development and Protection of the Environment.
- © España Báez, Ángel Javier.
- © Haddioui, Abdellah. Bassin Guir Association for Development and Protection of the Environment.
- © Haddioui, Wafa. Bassin Guir Association for Development and Protection of the Environment.
- © Kliatsko, Aleh. Global Playground Stockholm.
- © Kloub, Yazed Fayez. East & WE Center for Human Resources Development.
- © Liwiz, Stiva. Global Playground Stockholm.
- © Luse, Mairita. Asociación Columbares.
- © Mikhnovets, Iryna. Global Playground Stockholm.
- © Molina Navarro, Carmen. Asociación Columbares.
- © Montanari, Arianna. Global Playground Stockholm.
- © Morral, Robert. Insider Access.
- © Mottola, Giovanna. Consorcio ABN.
- © Razouk, Ali. Bassin Guir Association for Development and Protection of the Environment.
- © Zrigui, Mohamed. Bassin Guir Association for Development and Protection of the Environment.

Proofreading:

- © Montanari, Arianna. Global Playground Stockholm.
- © Morrall, Robert. Insider Access.

Photographies:

- © Alassaf, Rawan.
- © Alnoubani, Ahmad.
- © Dionigi, Chiara.
- © Egio Rubio, Carlos.
- © Gras Alarcón, Antonio Juan.
- © Kliatsko, Aleh.
- © Molina Navarro, Carmen.
- © Mottola, Giovanna.
- © Morral, Robert.
- © Mouhimdat, Mohamed.

Desing and layout:

- © Fátima López, graphic designer - www.detiketa.com



GREEN

4LIFE 

MANUAL

Index

THE GREEN4LIFE MANUAL	5
THE GREEN HOMES PROGRAMME	9
1. Phases of <i>Green Homes Programme</i>	12
2. Challenges of <i>Green Homes Programme</i>	12
3. Practical organisation of the <i>Green Homes Programme</i>	13
4. Examples of activities for <i>Green Homes Programme</i> workshops	30
5. Evaluation of the <i>Green Homes Programme</i>	80
GREEN HOMES PROGRAMME IN SIX COUNTRIES	82
Experiences and reflections of <i>Green in Everyday Life</i> project partners	82
ANNEX 1.....	99
ANNEX 2	102

THE GREEN4LIFE MANUAL

The **Green4life Manual** is a complete guide dedicated to environmental and social educators operating in both public and private sector who wish to implement an educational programme based on the Spanish programme *Hogares Verdes* (*Green Homes Programme*). It contains in-depth information about the structure of the programme, such as target groups, phases, challenges and practical organisation (dissemination and recruitment of participants, methodology and evaluation). It also includes examples of educational activities, as well as different experiences on developing this programme in six different countries.

The **Green4life Manual** is the result of the work carried out in the project **Green in Everyday Life**, financed by the European Programme for Education, Training, Youth and Sport ERASMUS +, under Key Action 2 (Strategic Partnerships), in which seven organisations from six countries (Spain, Italy, UK, Sweden, Morocco and Jordan) take part.

The objectives of *Green in Everyday Life* project are:

- **To promote moderate use of resources** through the increase of individual responsibility.
- **To raise awareness about the environmental problems** associated with the use of energy, water, waste and mobility.
- **To improve key skills and tools** available for workers and partner organisations.
- **To create a space for lifelong learning in environmental education at a European level.**



Some of the project partners during the transnational meeting in Stockholm. Aleh Kliatsko, Global Playground Stockholm.

The project methodology comes from Spanish Programme *Hogares Verdes* (*Green Homes Programme*), which is an educational programme for families that are concerned about the environmental and social impact of their decisions and daily habits. Through this programme, the families receive practical recommendations to reduce their consumption and provide the organisers of the programme with, for example, their electricity and water bills, which allow them to quantify the savings.

Green in Everyday Life is the first international experience of *Green Homes Programme*, working with different target groups in various countries in Europe, Middle East and North Africa. In each partner country, each partner entity has adapted the methodology of *Green Homes Programme* to the reality of their territory and the profile of their target group.

5

The partnership of **Green in Everyday Life** project:

Asociación Columbares, Spain. Lead organisation

Is a nongovernmental organisation established in 1985 in Murcia (Spain). The main objective of the organisation is the insertion of disadvantaged groups into the social and labour world: immigrants, youth, women, families, children, seniors, unemployed persons and others. The work of the organisation is divided into five areas: immigration, youth, training, social participation and environment.

Since 2009 Columbares has been coordinating the *Green Homes Programme* in Murcia, in which

Green in Everyday Life project is inspired. Through these years the organisation has conducted over 150 lectures and workshops and more than 200 environmental audits. Columbares has the merit of being the first organisation in Spain including group at risk of social exclusion as direct beneficiaries of Green Homes Programme. Moreover, it becomes the reference point for the internationalisation of Hogares Verdes, thanks to the experience of **Green in Everyday Life**.

Centro Nacional de Educación Ambiental (CENEAM), Spain. Partner organisation

CENEAM has been a leading centre for environmental education in Spain since 1987, promoting environmental awareness among the citizens. CENEAM works as a resource centre to support all of those public and private stakeholders that develop environmental education activities and programmes.

Their areas of work focus on the collection and dissemination of information specialising in environmental education; in the design and development of awareness programmes and citizen participation; in the development of educational materials and exhibitions; in supporting and organising seminars and other forums for

discussion and debate; in the development and implementation of environmental training actions; and in the cooperation with other public and private entities to promote environmental education.

In 2006, the CENEAM's education department designed the *Green Homes Programme*. During ten years (2006-2016) many different organisations have joined the *Green Homes Network*, working for a common goal and the same philosophy. The role of CENEAM in the **Green in Everyday Life** project is to advise all project partners in the implementation of *Green Homes Programme* in their countries, given their extensive experience as coordinator of the Spanish network entity.

6

Consorzio ABN, Italy. Partner organisation

Consorzio ABN is a non-for-profit consortium of Italian social cooperatives, established in 1997. Today, 55 social cooperatives (type A and type B) are members of Consorzio ABN, and they collectively employ more than 2,500 people, with about 570 staff belonging to disadvantaged groups. The social cooperatives' members operate in 12 Italian regions, as follows:

- North: Friuli Venezia Giulia, Emilia Romagna.
- Centre: Umbria, Toscana, Marche, Lazio, Molise, Abruzzo.
- South: Campania, Puglia, Calabria, Sicilia.

Consorzio ABN operates in different sectors. The distinguishing element of its work is "how" it operates: primarily through employing

disadvantaged people; secondly, working with a strong environmental ethos; thirdly seeking maximum profit for the community rather than for the individual. Its main sectors of work are the following:

1. Work opportunities for disadvantaged people.
2. Training, consultancy, social enterprise start-up projects.
3. Renewable energy.

4. Social housing, ethical building, self-building.
5. Social services to people and the community.

At the European level, Consorzio ABN collaborates with different organisations, NGOs, social enterprises and with European Networks such as REVES and DIESIS. It also has established collaborations with some Italian Regions, many Municipalities and a few National Ministries (particularly the Ministry for Labour and Welfare Policies).

Insider Access, United Kingdom. Partner organisation

Insider Access is a not for profit social enterprise focusing on the engagement of non traditional learners from disadvantaged backgrounds into informal, non formal and accredited learning, in order to break the barriers which hold them back and to help them to achieve their fullest potential in their life and society.

Insider Access works closely with the Ministry for Justice, NOMS, Probation Trusts, Jobcentre Plus/ DWP, is an accredited NCFE Centre and approved by the Skills Funding Agency.

Income generated by Insider Access (a not for profit social enterprise) supports:

- Innovative training in the community for unemployed, ex-offenders, hard to reach groups.
- Innovative training in prisons.
- Through the gate support.
- Informal offender mentoring.
- Work placement opportunities.
- Reduce re-offending in society.
- Make our communities safer.
- Help all individuals to achieve their highest goals.

Insider Access is a unique social enterprise created as a sustainable outcome from a European Social Fund ITM project.

Global Playground Stockholm, Sweden. Partner organisation

Global Playground Stockholm is a non-profit organisation based in Stockholm that aims to promote sustainable development among youth through engaging communication and learning process. Having currently more than 200 members, Global Playground is growing steadily both in size and in our scope of work, increasingly collaborating with other countries. Sustainable urbanism is one of the main areas of expertise, since Global Playground is focused not only on urban environment, but also on the lifestyle and consumption choices of people living in such areas. The main aim of Global Playground is to work

with these complex questions combining art and science and implementing playful communication methods that also include games. Our scope is to involve, ergo empower, youth with new knowledge and awareness. Global Playground Stockholm believes that local action steers global change.

NGO Global Playground Stockholm works closely with informational and educational activities about the many sustainability issues among its target audience. Global Playground has experience in running projects such as educational eco-tours in Stockholm, providing knowledge on renewable

energy, sustainable fashion and responsible consumption through lectures, presentations and engaging activities among others. Global Playground have successfully extended its focus to an international setting and is increasingly involving international partners for their projects, such as Belarus, Russia, Ukraine and Turkey.

The cooperation between and Asociación Columbares has a long story. Global Playground Stockholm participated in the training course *Green in Everyday Life* in Murcia, Spain, in November 2013 (a previous training course organised by Columbares to introduce *Green Homes Programme*), which was initially the base for the ***Green in Everyday Life*** project.

Bassin Guir Association for Development and Protection of the Environment, Morocco. Partner organisation

Bassin Guir Association for Development and Protection of the Environment is based in a rural area in the south east of Morocco: Ain Chouater.

The organisation, as a representative structure of the population, has an important role in the conception, management and realization of

development actions, by informing and raising awareness among the population on the issues of auto-development in local area and protection of the environment. It has, as well, an important role in identifying the population's needs and elaborating specific projects and monitoring.

East & West Center for Human Resources Development, Jordan. Partner organisation

East & West Center for Human Resources Sustainable Development (WE Center) is a nongovernmental organisation established in the beginning of 2008.

The vision of WE Center is to contribute in building a Jordanian and International society that flourishes with peace, respect and dialogue, and owns tools of change by creative youth hands.

The mission of the organisation is to work for building institutional and individuals capacity and empower them to make positive change in their societies and develop their social, economical, health and political life based on the values of human respect, partnership and integration among individuals and society.

The goals of WE Center are:

1. To build institutional and individual capacity

through development and change by way of peaceful and creative tools.

2. To enhancement of human morality and religious values.
3. To build local and international networks in support of women, youth and world peace issues.
4. To empower youth gender to improve their social, economic, health and political status.
5. To enhance dialogue within society and with other societies.
6. To organize and coordinate firm voluntary works which serve human society.

WE Center focuses all its work to upgrade human beings everywhere. WE Center believes that youth in the east and in the west is the most capable part of society to achieve positive change on all human, social, economical, political and environmental levels, both on the local and international dimensions to achieve the seek after peace.

THE GREEN HOMES PROGRAMME

Green Homes *Programme* is **an educational programme** for families concerned about the environmental and social impact of their decisions and daily habits. This initiative helps them in the process of change towards a more responsible management of their home:

- Promoting control of domestic consumption of water and energy.
- Introducing water and energy saving measures

a) Green Homes Programme for schools:

The *Green Homes Programme* can be developed in the same way and using the same methodology in schools as with families. The objectives of the programme in schools are:

- **To provide teachers with tools and resources to act as environmental educators.**
- **To promote ecological values** encouraging changes in behaviour patterns and strengthening behaviours that contribute to mitigate climate change.
- **To educate families and teachers to develop sustainable consumption habits**, thus promoting rational and sustainable use of natural resources.
- **To provide parents with skills and strategies for the education of their children**, strengthening their responsibility in acquiring key skills and achieving educational success.
- **To foster communication, participation and teamwork** of the educational community.

When working with schools, it is important to establish a contact with teachers and students. This is done in order to tune with each class the objectives and specific learning outcomes of Green Homes Programme.

The *Green Homes Programme* was created as

and behaviours.

- Helping to make shopping more ethical and green.

Despite the focus of the *Green Homes Programme* is for families, it can be implemented with any type of group, adapting the methodology and educational materials to the profile of the participants. In this guide we offer variations of the Programme for three different groups: groups at risk of social exclusion, schools and associations.

a proposal for both families and the educational community, to find alternative spaces and times in relation to the sustainable management of the schools and households. Thus, although the implementation of the programme is done at schools, students, their families and teachers can transfer their learning to their homes, amplifying the results and exchanging experiences. In the same perspective, it is important to create links with the activities proposed during the workshops and “domestic” habits for facilitating the replication of eco-friendly behaviours even at home.

The topics covered in the *Green Homes Programme* in schools are the same as when working with



Green Homes Programme for schools. Carmen Molina, Asociación Columbares.

families, accompanying the participants in the transformation of their schools and their homes,

with the aim of achieving a more responsible and sustainable management.

b) Green Homes Programme for associations:

The *Green Homes Programme* can also be organised with associations. The objectives and methodology can stay exactly the same as with families.

The only difference is that when conducting meetings or environmental audits, for instance, the technicians of the *Green Homes Programme* will coordinate their work with the contact person from the participant entity and the entity in turn will be responsible for inviting and motivating participants, as well as it will be co-responsible of programme monitoring. Also, the contact person will provide the technicians of *Green Homes Programme* with the profile of the participants: their expectations, prior knowledge, etc., so that the technicians can adjust the methodology and educational materials to the group characteristics.

It's also important to engage the **civil society and civil actors**, in order to take into consideration the environmental approach and the responsible consumption habits into their actions and plans. In the case of Morocco, they worked with students in coordination with some organisations –as fresh

citizens- as one of their main target groups, so later the students were the ones who made their family members aware about the importance of water and energy preservation.

There is a possibility that one responsible organisation of *Green Homes Programme* coordinates different communities or organisations (partners). In this case, partners could focus on different topics (energy, water, sustainable consumption, etc.), establish their action plans and provide the responsible organisation with reports of the activities, photographs and useful information.



Green Homes Programme for associations.
Carlos Egio, Asociación Columbares.

c) Green Homes Programme for groups at risk of social exclusion:

Saving energy and water and their efficient use in general is an issue of crucial importance in all countries. In some more than others this is especially felt as urgent due to the economic crisis. In such context, the groups at risk of social inclusion are more likely to beneficiate from a more efficient resource management. This is in fact a key factor for improving their economic situation and therefore to reduce their vulnerability. Waste is another emerging issue in developed and developing countries and in the consumer

society in which we live. However, the groups at risk of social exclusion often do not think about the waste they produce when making shopping. Waste reduction would not involve any financial effort on their part, but nevertheless would have a positive impact on the environment.

Based on the reasons explained above, the *Green Homes Programme* has the following benefits for groups at risk of social exclusion:

- The programme provides **training and practical recommendations for saving energy and water as well as reducing waste, thus helping to reduce their bills and therefore improves their economic situation**, which is often precarious.
- **It improves their training and education** in relation to environmental problems such as climate change, water scarcity, desertification, waste generation, etc.; allowing them to be closer to the level of the general population and therefore to be able to relate to other groups that are not at risk of social exclusion (improving their social and labour insertion).
- **It fosters their self-esteem, commitment and the acquisition of values.** Self-esteem is strengthened because in the programme the participants can share their knowledge, making them feel useful. The commitment is strengthened by the *Green Homes Programme* methodology, where it is permanently pointed out that the objective of the programme is to achieve collective challenges. The values are strengthened by promoting the respect for the environment and saving resources, even in cases where there is no financial motivation. For some participants the knowledge and awareness gained in the programme will give them an ‘eco advantage on the labour market’, allowing them to demonstrate ‘added value’ at their job interviews.

The methodology of *Green Homes Programme* when working with groups at risk of social exclusion is the same as with families, schools and associations, adapting the educational

materials to the characteristics of the group. The programme delivery organisation is made in the same way as in the case of partnerships with associations, that is, when organising meetings and environmental audits as well as any activity that may arise, the technicians of the Programme coordinate their work with the responsible person from the organisation or association representing the collective that the programme is working with. This person is responsible for inviting and motivating the participants and is co-responsible for monitoring the programme and providing the Green Homes technician with information on the profile of participants: their expectations, previous knowledge, etc.



Green Homes Programme for groups at risk of social exclusion. Carmen Molina, Asociación Columbares.

In some cases, the entities working with groups at risk of social exclusion have trained their own technicians to take advantage of their regular visits to implement the *Green Homes Programme*. This methodology is used, for example, by the Red Cross in Spain, which makes regular home visits to accompany the elderly.

1. Phases of Green Homes Programme:

The *Green Homes Programme* has **three phases**, which are conducted in **three consecutive years**.

- In the **first phase**, participants face the challenge of **saving a significant amount of water and energy in their home**.
- For participants who chose to stay in the programme, in a **second phase**, a more **respectful way to consume** is proposed.
- The **third phase** consists of **workshops and practical activities that provide more in depth information** on the issues discussed during the

first two phases.

Sometimes the structure of the project does not allow to work for three consecutive years, as there is funding only for a shorter period, usually one year. In this case, *Green Homes Programme* can be adapted to a shorter duration, addressing all issues during the same year and dividing the workshops or meetings on topics of energy and climate change, water, sustainable consumption and sustainable mobility. In this case, domestic saving kit (explained below) can include elements corresponding to all three phases of the programme.

2. Challenges of Green Homes Programme:

In the **first phase**, participants receive a simple but ambitious collective challenge:

- **Reducing domestic CO₂ emissions by 10% within two years.**
- **Reducing between 6 and 10% domestic consumption of water**, depending on the type of housing.

During the **second phase** the participants of the previous phase are offered to continue with new challenges:

- **Excluding from the shopping list at least two products harmful** to environment and/or health.
- **Excluding from the shopping at least two superfluous products.**
- **Including or strengthen new criteria when choosing what to buy:** prioritise local products, avoid over packaging, etc...

The main objectives of this second phase of the programme are: to make the participating families more aware of the effects of their consumption

decisions; to teach them to plan what they really need; to phase out products wasteful and harmful for the environment or their own health; and to increase the number of healthier and more ethical products.

The ultimate goals of the **third phase** are:

- **Maintaining the sustainable consumption habits obtained** during the previous phases.
- **Analysing the evolution of water and energy consumption in their household** during the programme.

With these objectives the programme intends to incorporate and internalise attitudes and habits worked on throughout the programme in the daily lives of the participants.

If the *Green Homes Programme* is conducted in a single phase, the objectives to be achieved in the three editions can be condensed in one year or be reduced.

3. Practical organisation of the Green Homes Programme

a) Dissemination of the programme and recruitment of the participants

To apply for participation in the programme, the interested families must fill in an **application form**, attached to the *Green Homes* leaflet (do not confuse with initial questionnaire). This application form contains the basic data of each household, which some selection criteria if necessary (type of housing, number of residents in the home, existence of individual water meters, etc.).

The leaflet also informs the potential participants about the objectives and duration of the programme, the commitments made by each party involved and ways to contact the organisers.

In case of interested schools, they should fill in an application form containing basic data of each school building, such as lighting and heating system used, number of students, number of floors and classrooms, etc. The application form can be used as promotional leaflet when introducing the *Green Homes Programme* to schools' directors but also as supporting document to investigate students' general knowledge of the school building they go to. *Green Homes* technicians can decide to complete the application form in group with each classroom involved during environmental audits, or to leave a copy to students and collect it in a second time.

Examples of leaflets used by the partner organisations:



DATOS PERSONALES

Nombre y apellidos:

Domicilio:

C.P. y Localidad:

Teléfono:

La ficha de inscripción se enviará antes del 31 de enero de 2009 a las diferentes entidades participantes, excepto los vecinos de Segovia que lo enviarán a:

Área de Educación del CENEAM-AH: Ester Bueno
 P. José M. Ruiz-Díaz s/n
 40109 Valdeán-S, Ildafonso- (Segovia)
 921 473863 - inf2_ceneam@oapn.mma.es

hogares verdes

MÁS INFORMACIÓN:

CENEAM, Centro Nacional de Educación Ambiental
 Ester Bueno 921 473 863 - inf2_ceneam@oapn.mma.es

<http://www.mma.es/ceneam>
<http://hogares-verdes.blogspot.com>

Organizan:  

¡¡APÚNTATE!!

hogares verdes 2009

... UN PROGRAMA DE PARTICIPACIÓN AMBIENTAL DESDE TU HOGAR

"Antes de cambiar el mundo, da tres vueltas por tu casa"
 (Proverbio chino)

En nuestros hogares consumimos una cantidad de energía y agua muy importante, por ello son un escenario perfecto para impulsar cambios de comportamiento que traigan un uso más razonable y solidario de estos recursos colectivos.

Queremos invitar, a un conjunto de familias segovianas, a participar en un programa que impulse el consumo responsable del agua y la energía en el hogar, lo cual tendrá dos consecuencias muy positivas: para nuestro bolsillo, un ahorro en la factura familiar y para el patrimonio común, un ahorro de recursos que se traduce en un ambiente más saludable.

Contamos con la gran ventaja de que nuestro bienestar y calidad de vida no van a verse afectados porque, con acciones sencillas y pequeños cambios de hábitos, es posible reducir significativamente el consumo de agua y de energía.

El Centro Nacional de Educación Ambiental CENEAM- y la Diputación de Segovia, junto con algunos ayuntamientos de la provincia, colaboran en la puesta en marcha del Programa HOGARES VERDES y se comprometen a poner a disposición de las familias participantes todos los recursos necesarios para el desarrollo del mismo, así como a hacer el seguimiento y prestar el apoyo necesario a las acciones que se realicen en los hogares.

Tienes la posibilidad de participar, junto con más familias segovianas, en un reto colectivo:

- * Reducir las emisiones de CO2 en un 5,2% (el objetivo del Protocolo de Kioto).
- * Disminuir entre un 6 y un 10% el consumo doméstico de agua.

DESDE LA COORDINACIÓN DEL PROGRAMA OFRECEMOS:

- * Reuniones trimestrales donde se informará sobre cuestiones básicas y muy prácticas sobre el consumo y ahorro de agua y energía en el hogar. Dichas reuniones se celebrarán en los diferentes municipios.
- * Atención personalizada, a través de teléfono y correo electrónico, para ayudar a resolver todas las dudas que surjan.
- * Materiales con información y recomendaciones prácticas y un sencillo equipo de ahorro.

LAS FAMILIAS PARTICIPANTES SE COMPROMETEN A:

- * Enviar la ficha de inscripción adjunta.
- * Asistir a las reuniones informativas trimestrales.
- * Entregar datos de consumo de luz y agua (estos datos serán tratados confidencialmente)
- * Rellenar y enviar cuestionarios para el seguimiento del consumo en cada domicilio.

¡PARTICIPA Y AHORRA PARA TI Y PARA TODOS!

hogares verdes

DATOS DE LA VIVIENDA

¿Tiene residentes:

Tipo de vivienda: Piso Adosado Paredado Individual

Superficie (m² aprox):

Jardín: SI NO

Calefacción: individual colectivo

Energía utilizada para calentar su hogar (puede marcar más de una casilla):
 electricidad gasoil gas (por una / butano) leña otro

¿Tiene contador individual de agua?: SI NO

The technicians should maintain a **database with the information of all the participants** and their personal data, as it can be useful for organising the meetings, and as a unique code for each participant, to identify their questionnaires and guarantee their confidentiality.

Green Homes Programme's members have tried different ways to disseminate the information on the programme to people who might be interested in participating. Depending on the type of locality (city, rural territory, etc.), the media used should be different.

I. In case of a city:

- Posters and brochures placed in the busiest places in the city (markets, pedestrian streets, cultural centres, sports centres, etc.).
- Mailing to the Parent Associations of local schools.
- Letters to people that have participated in other educational activities organised by the entity that wants to promote the programme.
- Presentations of the programme in civic associations, training courses, schools, citizen participation events, etc.).
- Informational stand in shopping centres.
- Information in social networks and web
- Information on the web and social media.

In some territories, as Nordic countries like Sweden, it can be quite difficult to involve people in projects like *Green Homes Programme*. In these cases, it can be useful to contact organisations working on renting apartments, which could provide a list of households to contact with.

II. In rural territories:

The recruitment of participants is easier due to the close relationship that people tend to have with the technicians that organise the programme. In any case, it is easier to inform people, with posters and brochures placed at key meeting points and presentations for target groups or community leaders.

III. In schools:

The best way to reach schools is to contact the management team, the Parent Teacher Association and/or the student association in order to inform them about the programme opportunity. It is advisable to hold an informative meeting at school and provide a kindergarten service for the youngest children, so the families are able to participate in the meeting. It is also essential to have the commitment and support of both teachers and non-teaching personal.

IV. With citizen associations:

When working with associations, first it is recommended to organise a communication campaign with the selected type of entities, and, where appropriate, municipal services working within the relevant sectors. For example, if you are planning to work with groups at risk of social exclusion, in addition to contacting social organisations, you should contact Municipal Social Services and other municipal agencies that provide assistance to the target groups (day centres for seniors, shelters for immigrant women and victims of gender violence, supervised apartments for minors, juvenile prisons, multipurpose centres for people with disabilities, etc.). A presentation of the project can be sent, including a brief description, its objectives, activities, duration, commitments made by each party involved and ways to contact the technician who will "provide tutoring" to the group.

After an initial expression of interest, a meeting with the representatives of the organisations should be arranged, in order to explain the programme and evaluate the real possibilities of its implementation in their organisation, depending on the profile of their users and the commitment the social educators and technical personal of the entity are willing to accept. To ensure the success of the programme when working with civic associations, the deep involvement of a person from the partner organization is essential.

b) The methodology of Green Homes Programme:

The working methodology of the *Green Homes Programme* consists of **organising regular meetings or workshops with families (or with other groups)** in which the participants work on the various issues addressed by the programme: saving energy and water, sustainable consumption and sustainable mobility. Furthermore, at the first meetings, the participants receive a **domestic saving kit**, which is explained to them. During this first meeting the families are invited to complete an initial questionnaire, which contains data of their energy and water consumption from the year before the programme and their consumption and mobility habits. At the end of the programme, families complete the final questionnaire, providing data on the energy and water consumption during the year of participation in the programme, and their consumption and mobility habits. In this way, the organizers can evaluate the energy and water savings and changes in habits.

As a variation to the traditional methodology, organisers can conduct environmental audits (eco-audits) in the homes of participating families, schools and local civic associations.

The methodology of different parts of the Programme is explained below:

1. Environmental audits

Environmental audits are an instrument that involves **environmental assessment and improvement** of housing, offices of civic associations or schools. This is a very simple way of inviting the participants for a reflection about the consumption of natural resources, waste production, contamination, together with our relationship with other living beings and spatial planning. It also detects management flaws, and applies corrective measures to improve the environmental quality of housing, schools and offices, and their immediate surroundings.

As discussed above, the audits are not part of the general *Green Homes Programme* methodology,

but represent a modification and additional activity which provides more personalised information on how to save energy, water and residues at home, school or office and have more sustainable consumption and mobility habits. If the *Green Homes Programme* includes audits, they should take place at the beginning of the programme, so subsequent meetings and workshops will serve to strengthen and expand the ideas that have been pointed out during in the audit.

Depending on human and economic resources, **audits can be done individually** in each of the participating households (maximum degree of customization of the recommendations for saving energy, water and waste) or for a group (either at the headquarters of the partner organisation, or in one household inviting several families). If the audit is conducted **for a group**, the trainer has to give recommendations for the different situations that may occur in houses (for example, providing information about different heating systems, water heaters, etc.), so that all participants can transfer these recommendations to their homes.

A protocol for conducting audits in households and schools is explained below:

1. Environmental audits in households:

For the first visit made by the technician, he/she gives information about the saving kits, why they are distributed, how to use them and their utility in changing the amount of energy and water used in the house. The technician also distributes the initial questionnaires.

The protocol for environmental audits in homes can be used in audits in associations. In this case, if the office does not have all the usual characteristics of a house (kitchen, bathrooms, dining room and living room), the audit can be completed with a power-point presentation containing images of equipment or consumption points of energy and water consumption, as well as waste generation in

the missing rooms. For example, one of the most common cases is that the office lacks a kitchen, but this can be solved easily by projecting some images of a fridge, a washing machine, a microwave oven...).

The proposed protocol can be adapted depending on the type of housing and the region where the Programme is implemented.



Environmental audits in households. Picture 1: Carmen Molina, Asociación Columbares. Picture 2, 3: La Verdad Newspaper.

Protocol - script of key questions and tips to conduct an environmental audit in a household:

1. Kitchen / the laundry room

General questions:

- **Take a look at the lighting.** Advice using energy efficient light bulbs. LED is the best option, but fluorescent light bulbs and downlights can be used if LED are not available.
- **What do the habitants do with the leftover oil after cooking?** Advice to collect it in a closed jar and either bring it to recycling centre (if one exists) or make soap from it.
- **How do the habitants wash their fruit and vegetables?** Advice to use a bowl.
- **Important:** cover the pans and pots when cooking; adjust the size of the pot/pan to the size of the heat source.
- **Ceramic hob:** use the residual heat.

Q & A related to the dish washing:

- **Is there a dishwasher?**
 - ✓ **NO: How do they wash the dishes?** One sink for the soaping and other for rinsing (a bowl can be used as well).
 - ✓ **YES: How do they use the dishwasher?** Economic programme, fully loaded, rinse with dishwasher, not by hands, if possible (see instructions of the dishwasher), use low water temperature and let the dishes air dry.

Q & A related to the fridge:

- **Does the refrigerator form frost?** If so, defrost regularly.
- **Does it close hermetically?** If not, change the seals.
- **When placing the food inside the fridge:**
 - ✓ Cover the liquids and wrap the food (to avoid liberating moistness and overwork the fridge).
 - ✓ Allow the products to cool before putting them in the refrigerator and freezer.
 - ✓ Thaw the products by placing them in the refrigerator the night before (the cold given off is used by the fridge and in this case it is not necessary to use oven or microwave oven) or by placing

them at room temperature. Never under the tap.

- **Where is it located in the kitchen?** It should be placed away from heat sources and be slightly separated from the wall to ensure aeration.
- **When buying a new fridge,** advice choosing one with automatic humidity control and energy class A+++.

Q & A related to the oven:

- **How do they check if the food is done?** Open only when absolutely necessary, because 20% of the energy is lost when the oven door is opened. Use light and the glass door instead.
- **For small amounts of food** it is better to use toaster oven or microwave oven with grill function.
- **When buying new oven or gas furnace:** advice choosing one with automatic electric ignition to save gas.

Q & A related to the washing machine:

- **How do they use the washing machine?** At full load, better with cold water, do not tumble dry, if possible.

Q & A related to the waste:

- **Do they separate the waste?** Speak about the recycling and the need to bring electric appliances, furniture, batteries, electronic devices, etc. to the recycling point.
- **Do they use disposable products of (paper towels, paper table covers, plastic cups and plates, etc.) often?** Change them for their reusable versions.
- **Do they think about the type and quantity of food wrapping?** It is better to buy in bulk or in recyclable wrapping, reduce the use of polystyrene, plastic bags and avoid aluminum.
- **Do they consume bottled water or use water filters?** Explain the residues generated from buying bottled water and explain the alternatives.
- **Important:** Reduce the use of batteries and use rechargeable batteries.
- **Where do they usually do their shopping?** Better buy local (less transport, more local development), ecological and fair trade.
- **Explain shortly fair trade and ecological products.**
- **Speak about composting.**

2. Bathroom

General questions:

- **Have you ever checked your household for water leaks?** Only thing you have to do is to read the metre before going to bed and in the morning.
- **Tip:** Close the stopcock slightly and always close the main stopcock when leaving your house for a trip.

Q & A related to the sink:

- **How do they brush their teeth, hands and how do they shave?** Turn off the tap; for teeth use a glass and fill the sink to shave.
- **If they are going to change the taps,** suggest choosing mono-bloc (save water and energy) with upper limitation of flow and standard opening position being “cold”. **If not, use temperature regulators with thermostat.**

Q & A related to the shower:

- **How frequently do they take a bath?** Shower is better.
- **Do they collect the cold water that comes out from the shower before showering?** Use a bucket.

Q & A related to the WC:

- **Do they have a paper bin in WC?** Throw everything possible there, including toilet paper.
- **Do they know how to check if their tank is losing water?** Put a couple of drops of ink or food coloring in the tank. If after 15 minutes the water in the toilet bowl has changed color, the tank is losing water.
- **Important:** use white toilet paper, without chemical substances. It is easier to treat it.

**DEMONSTRATION OF WATER CONSUMPTION WITH AND WITHOUT AERATORS
DEMONSTRATION OF LOW-CONSUMPTION SHOWER HEAD**
3. Living room/Dining room**Q & A related to the windows:**

- **How are the windows and doors isolated?** Check for leaks.
- **If they change the windows** suggest double glazing windows.
- **How long do they open the windows for the air to change?** 10 min. are enough.
- **Do they have any element that protects the house from sun?** Install curtains and blinds or white reflective sheeting on windows and awnings on the outside. In summer, keep blinds and curtains half way down during the day and open at night; in winter do the opposite.

Q & A related to lighting:

- **Do they clean their light bulbs?** It should be done.
- **Important:** Use the natural light any time it is possible and turn the lights off when they are not necessary.
- **Speak about incandescent bulbs, low consumption light bulbs and LED.**

Q & A related to heating:

- **What temperature do they keep in winter in their homes?** Between 19-21°C (in bedrooms this temperature can be 3 - 5°C lower).
- **Do they have central heating?** If so,
 - ✓ Do they bleed the radiators?
 - ✓ Do they do the periodic maintenance? Cleaning of the filters.
- **For any type of heating:** Do not block it and clean it periodically.

Q & A related to the air conditioning:

- **Do they have air conditioning?**
 - ✓ **YES. At what temperature do they usually set it?** Between 25-26°C. Hint: Complement the air conditioning with a ventilator (better distribution of the air).
 - ✓ **NO. If they are planning to install it:** place it in shadow, preferably in the northern side, if not possible: place a small roof over it that gives it a shadow. Choose class A.

Q & A related to electronic appliances:

- **Do they turn off the stand-by?** Explain the ghost consumption and advice using power strips with switch
- **Do they leave the mobile phone charger plugged in constantly or do they charge the phone over night?** Relate this to the timers.
- **Do they leave computer and monitor turned on for a long periods of time? Do they turn off the monitor when switching off the computer?** Turn it off when it is not being used, and programme to go into hibernation after 5 minutes of inactivity.

DEMONSTRATION OF A MEASUREMENT OF ENERGY CONSUMPTION OF VARIOUS ELECTRIC APPLIENCES AND VARIOUS TYPES OF LIGHT BULBS.

DEMONSTRATION OF DIFFERENT TYPES OF LIGHT BULBS.

4. Garden

- **How do they clean their garden?** Using a broom, not a hose.
- **What type of plants de they have?** Better local ones.
- **Do they have lawn?** It is better to use ground cover plants (protect the soil from erosion, limit the evaporation, reduce the growth of the weeds and do not need a lot of care); if they want lawn, it should be a mix of resistant species with lower need for maintenance.
- **When do they water their plants?** Early in the morning or late in the evening, one can use water collected from the shower, water from cooking, etc.
- **How do they water the plants?** Better drip irrigation, there are programmable versions.
- **Tip if the garden is big with many plants.** Set up a rain water collecting cistern.
- Do they have a pool?
 ✓ **YES. Do they cover it during the winter?** Cover it to protect water from getting dirty and avoid changing it in the beginning of the summer.
- **What's the lighting system used in the garden?** Speak about solar lamps and photosensitive lamps.

5. Mobility

- **Speak a bit about sustainable mobility.** Compare the same using different means of transportation.
- **Speak about low emission vehicles found in the market.**
 ✓ **Important:** chose a vehicle adapted to the needs, taking into account the consumption and emission data.
- **Some tips for efficient driving:**
 - ✓ Drive in the highest gear possible and at low rpm.
 - ✓ Drive at moderate speed and avoid sudden braking and acceleration.
 - ✓ When slowing down, let the car roll braking only when necessary.
 - ✓ The extra weight, air conditioning, a roof rack and circulation with windows open increases fuel consumption.
 - ✓ Heat the car for more than 30 seconds is ineffective.
 - ✓ Maintenance of the vehicle.

2. Environmental audits in schools



Environmental audits in schools.
Carmen Molina, Asociación Columbares.

Environmental audit in schools consists of a number of activities **to find out the energy the schools uses** for lighting, heating, etc.; **what are the characteristics** of different types of energy (where do they come from, how do they arrive to the school, what are their environmental impacts), and finally we find out if **the energy is used wisely**. The audit should be daily active and involve more participants and beneficiaries, regarding local contexts for every country and commune, also the local environment. Environmental audits at schools

can be conducted with both the participation of teachers and students for involving them during the first stage of the *Green Homes Programme*.

Environmental audits represent in fact the first contact with the target group during which is important to investigate their general knowledge about schools' structure and functioning perception and consequently plan a fitting workshop activity. Nevertheless, the audit should also involve many society actors: families, students, teachers, society actors, government, school programs...



Environmental audits in schools.
Mohamed Mouhimdat, Bassin Guir Association.

Protocol - script to perform an environmental audit in a school:

During the **first phase**, the educator approaches **the students** and ascertains their preconceptions, in order to introduce the subjects to study (energy, water, waste, etc.).

For the audit, it is important that **the participants have a deep knowledge** of the school. For this reason, one of the first activities is to show them different dependencies of the school, its distribution and the are they use for. It helps to plan the audit better and allows the participants to form an idea of the characteristics and dimensions of the questions dealt with. To do this, we can deliver to every student a plan of the centre where they will have to place (preferably in small groups and during a short walk through the school) the various departments: classrooms, laboratories, offices, toilets, storage spaces, etc... and all elements related to, for example, energy: boiler, transformer, meters, light bulbs, radiators, different types of machines, etc. They should take into account not only the space and its uses but also the ventilation, orientation, etc... We end this phase by sharing the action plan in an open debate, in which we can write down the students' ideas about energy use and consumption. We can also ask each student to fill in a short questionnaire about their own energy consumption habits. At the end of the programme, we can ask them to fill in the questionnaire again, in order to observe possible changes in attitudes and habits.

We can establish three blocks of activities:

- Block I: What kind and how much energy the school uses?
- Block II: What are the characteristics of different types of energy we use at school?
- Block III: How do we use energy in our school?

To facilitate this work, sheets and questionnaires should be used.

In a second phase, **we collect, systemize and analyse the data.**

Finally we draw conclusions and proposals for the development of the action plan. After thinking about the results, the group develops some proposals to rationalise and improve the use of energy in the centre from the environmental point of view, which are later sent to the Environmental Committee (or Board of Governors) of the school, which will be responsible for drafting a final report with sn ACTION PLAN and a CODE OF CONDUCT to be agreed by all.

II. Meetings or workshops:

1. Timing of the meetings:

The frequency of the meetings can vary, depending on the duration of the programme. If the programme is annual (calendar year) meetings of presentation of each topic can be done quarterly. In addition, the participants can be proposed to take part in voluntary additional meetings or workshops for those who would like to obtain more information.



Workshop on ecologic gardening.
Carlos Egjo, Asociación Columbares.

The invitation to the meetings can be done by email and by making a confirmation call a few days before

the meeting. The ability to offer a kindergarten service parallel to the meetings is a key element to facilitate assistance.

As an example, we propose a possible schedule of meetings and issues to be addressed in each of them:

- **Saving water and energy:**
 - > 1st Meeting: Presentation of the module. Saving energy at home.
 - > 2nd Meeting: Saving water at home.
 - > 3rd Meeting: Transport and sustainable mobility.
 - > 4th Meeting: Final evaluation and a celebration.
- **Sustainable consumption:**
 - > 1st Meeting: Presentation of the module. Ecological agriculture and farming.
 - > 2nd Meeting: Where to find the products that interest us. Consumer groups.
 - > 3rd Meeting: Fair trade and ethical shopping.
 - > 4th Meeting: Final evaluation and a celebration.
- **The workshops module:**
 - > 1st Meeting: Presentation of the module. Home composting.

- > 2nd Meeting: Organic farming practices.
- > 3rd Meeting: Efficient driving.
- > 4th Meeting: Development of natural products for cleaning and personal hygiene.
- > 5th Meeting: Final evaluation and a celebration.



Workshops in schools. Giovanna Mottola, Consorzio abn.

Keep in mind that this proposed schedule is highly variable, as it depends on the length of Programme, availability and characteristics of the group, prior knowledge and expectations, etc.

For example, in the case of groups at risk of social exclusion with limited financial capacity, it is preferable to place more emphasis on saving energy and water, waste reduction and management, sustainable mobility habits and responsible shopping from the point of view of consuming local products. In these cases, you can introduce ecological agriculture and farming as well as fair trade, but they are likely to be unaffordable for these groups because these products are generally more expensive than their alternatives. The same situation may arise in countries where the supply of such products is limited or nonexistent.

Workshops in schools should be organised through an interactive, interdisciplinary and participatory approach; in this way it will be easier to catch the attention and the interest of young students. Focusing on relevant topics of *Green Homes Programme* each activity can be planned in a participatory way using for example games, videos, group activities and discussions. One option is to plan workshops as “scientific experiments”

sessions to stimulate reflection and attract young students. A game-oriented approach can represent the baseline of the activities even if the general and realistic environmental issue is the core objective of workshops.

Flexibility and adaptation to the reality of the territory and the needs and characteristics of the group is vital to ensure not only the success and usefulness of the programme, but the motivation of the participants as well.

In the case that the programme lasts only one year, the organisers should increase the frequency of meetings and workshops, for example once a month, to deal with all the issues.

2. Organisation of meetings on WATER, ENERGY AND MOBILITY:



Workshops on water, energy and mobility. Robert Morrall, Insider Access.



Workshops on water, energy and mobility. Carmen Molina, Asociación Columbares.

It is important to take into account that at the first

meeting, before speaking about energy saving at home, there should be a space for attendees to present themselves. In case of working with groups at risk of social exclusion, these presentations should be guided by the *Green Homes trainer*: after presenting himself/herself, the trainer will invite the participants to tell their name and add, for example “something they would like to learn” or something “they can do well” or “something they can teach to the others”. Thus, the organisers can avoid uncomfortable situations and presentations that do not bring anything to the programme, when participants tell their problems to the others and explain why they are facing a situation of social vulnerability.

The trainer must provide a comprehensive introduction to the programme and deliver the domestic saving kit.

Finally, there should be space for the participants to express their opinions and ask questions.

To facilitate the presentation of issues related to saving water and energy and sustainable mobility, the trainer can use power-point presentations, videos, simulation games or any other fun and participatory activity.



Workshops on water, energy and mobility. Carmen Molina, Asociación Columbares.

3. Organisation of meetings on CONSUMPTION:

In the consumption module you can invite some local producers or marketers to explain what the organic farming and fair trade is, or how a group of green consumption works.

In the first session, the participants receive a bag of commodities from ecological agriculture or farming, fair trade products and local products, to allow participants to know the options available nearby.

In the remaining sessions, organised as workshops, participants will be encouraged to research and test new products, even order them together, to achieve the objectives of the programme.

Other topics related to sustainable consumption issues can be included in the workshops as well, such as technology, clothing. This has to be done taking into consideration the above mentioned

idea. of taking into account the characteristics of the group and the need of adapting the contents, so that they are useful for the needs and purchasing power of the group.

Non-formal activities, such as role play and group dynamics, are extremely useful as they make the participants reflect about their consumption habits. The topics of these activities can show the difference between buying in the local market or supermarkets; social, environmental and economic consequences of each alternative; the importance of labeling... This applies to any other product like clothing, technology, etc.

Finally, it is important to note that apart from the contact with participants during the meetings, periodic monitoring and contact is recommended. Telephone, e-mail, personal visits are, for instance, good ways. It is also useful to maintain an open communication channel, like a group e-mail

or a Facebook group, where the participants can receive updated information, invitations to interesting events, etc. When working with schools or associations, this responsibility can be given to the contact person in the participant entity, who will be responsible for following up with the participants and intermediary between them and the *Green Homes* technician, informing about developments and possible doubts.

4. Energising the workshops



Activities for energising the workshops.
Antonio Juan Gras Alarcón, Asociación Columbares.



Activities for energising the workshops.
Iryna Mikhnovets, Global Playground Stockholm.

In order to support the methodology of the programme, it is recommended to give the participants a product or item that facilitates and encourage savings: solar or dynamo flashlight, natural hygiene or cleaning products, to give a few examples. It is also useful to perform some recreational activities that combine several of the issues discussed during the programme. For

example, you can organise a bike tour visiting various shops for ecological, fair trade and local products, markets, thus combining sustainable mobility and sustainable consumption. This proposal is particularly useful in the cases when the programme has been developed with various associations independently, allowing the participants from different entities to meet and exchange their experiences.

5. Educational materials:

1. Domestic saving kit:

The domestic saving kit consists of a series of **tools and devices that help families to save energy, reduce waste and improve their consumption habits**. It is very important to convey that although the kit can help them in the process, the most important thing is to change their consumption habits.

The kit is delivered **in the start of each of the first two phases of the programme**, during the first two consecutive years. The first year the participants receive a kit for saving energy, water and mobility, while the second year they receive a kit related to sustainable consumption. **If the programme lasts only a year, the delivery of the kit can be done in two phases as well**, so that the second kit coincides with the start of the meetings or workshops on consumption. Thus, the participants remain motivated to stay in the programme to receive the second kit.

If the programme is implemented with organisations, the number of kits can be adapted to the characteristics of the group. For example, in the case of associations whose users go to the office of the association just for a few hours, we can choose to provide a kit per household; while in shelters, prisons, with drug rehabilitation centres, etc., we can deliver one or more kits for the centres in which the users live.

Finally, in the case of schools, **we may choose to deliver either a kit for the centre**, if the evaluation

of the consumption takes place in the centre itself, or **provide savings kits for selected parents and teachers**, who may apply simultaneously saving devices and recommendations in their homes.

An example of domestic saving kit that can be delivered to the participants in each of the two in the continuation. However, this kit can be adapted to the economic possibilities of the project, the characteristics of the territory and the profile of participants.

It's also possible to prepare personalised domestic saving kits, after doing the environmental audits in households and analyse which elements are more useful for each family.

To be coherent with the philosophy of the programme, the materials for the domestic saving kits should be bought in local establishments, so that any participant in the programme can buy any product from the kit locally, if they choose so, without any

complications and promoting local trade.

Example of domestic saving kit for the first phase of the programme: "Saving water, energy and mobility":

As a guideline, we offer a content of an example domestic saving kit, costing around 50 EUR

- **Light bulb:** OSRAM DULUX SUPERSTAR 16W/827 LUMILUX Warm White
- **Digital thermometer:** TFA/Germany
- **Shower head:** TRES n° 913472906.
- **Aerator:** Bossini n° R000060030035
- **IDAE** (Institute for Diversification and Saving of Energy) **guide (in Spanish).**
- **Sheets with recommendations** for saving energy and water and to a more sustainable transportation (links below).
- **Magnets, stickers, bookmarks, or other materials** that can help remind the recommendations, tips and tasks.

Possible materials to be included in the kit for water and energy savings and sustainable mobility.



You can also include other materials in the kit, such as LED, timer, multiple power strip with switch, flow restrictor for the shower, solar flashlight, standby eliminator, etc... always taking into account our target group and economic resources available.

Examples of stickers included in the savings kit





Examples of stickers included in the savings kit.

The “alternative shopping kit” helps the participants to become familiar with different types of everyday consumer things, is valued at about 20 EUR and consists of:

- ½ kilo of locally produced organic meat.
- 1 packet of legumes of a local variety.
- 1 packet of organic and fair trade coffee.
- 1 tablet of fair trade chocolate.
- 1 packet of ecological rice.
- 1 microfibre dish cloth that reduces the use of cleaning products.



Example of the alternative shopping kit for the second phase of the programme: “Sustainable consumption”.

As noted above, the contents of the basket can be changed considerably to adapt to the local reality and the profile of the group. For example, in the case of groups at risk of social exclusion it can be more useful to provide bags for selective waste separation, since often their level of awareness in this area is low, as well as cleaning products prepared from natural products such as soap, vinegar or lemon, food products purchased in bulk at local markets or shops, etc. Besides being associated with sustainable consumption, these products also help to reduce waste generation and improve the economy of the participants, which is often very precarious. Similarly, the kit will vary in each country, since in some countries it is easier to

find products in bulk and almost impossible to buy fair trade or ecological products.

In case of schools, all the supporting documents should be produced with an attractive style, as the scope is to transfer “serious” environmental information with a game-oriented approach.

II. Recommendation sheets:

It may also be interesting to give the participants recommendation sheets to save energy at home, in transport, save water, reduce waste, make their own cleaning products or make a more ethical and green purchasing...

These recommendation sheets should be adapted to the target group and local conditions.

Links:

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/fichas-energia-2011_tcm7-13473.pdf

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/fichas-ahorro-agua_tcm7-13432.pdf

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/fichas-tpte2011_tcm7-13444.pdf

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/cesta-compra_tcm7-175153.pdf

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/limpieza_tcm7-175154.pdf

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/comercio-justo_tcm7-13441.pdf

http://www.magrama.gob.es/es/ceneam/programas-de-educacion-ambiental/hogares-verdes/agricultura-ganaderia-ecologica_tcm7-13447.pdf

4. EXAMPLES OF ACTIVITIES FOR GREEN HOMES PROGRAMME WORKSHOPS

Some examples of workshops that can be used in the *Green Homes Programme* are offered in this section. These workshops are examples of the best practices that the **Green in Everyday Life** partners organisations have done in their countries.

ACTIVITY 1



PARTNER ORGANISATION	Asociación Columbares and Insider Access (adapted from a game initially proposed by CEA Polvoranca).
NAME	Energy Snakes and ladders.
TOPIC	Energy.
TYPE	Game.
DURATION	Max. 1 hour.
TARGET GROUP	Children (6+ years) and adults. Groups with learning difficulties.
MATERIALS	Blackboard, paper, pencils, dice, hourglass of one minute, game board, game pieces and question cards.
OBJECTIVES	To introduce the main aspects of energy efficiency in housing in a playful way. To point out the importance of carrying out simple energy saving practices at home.
DESCRIPTION	<p>This activity is an adaptation of the classic game of the Snakes and ladders: Energy Snakes and ladders.</p> <p>The educator divides the large group into small groups of 4-5 participants.</p> <p>The teams are rolling the dice and move on the board as during a regular game of Snakes and ladders. Depending on the square they end up with in each turn they will have to take a test, which can be: a question, a drawing or charades (Exercise cards). If the move stops on the “mill to mill” square, the game piece travels to the next mill. If a game piece ends up on the “death” field, they have to go back to the beginning of the game. The group who first reaches the final square wins.</p> <p>Throughout the game the educator explains the basic ideas behind each test card and promotes critical thinking about the consequences of consumption and usage of energy.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	<p>To adapt the questions marked by *to your local reality and your local statistics. Feel free to add your own questions and tasks to the game.</p> <p>It is necessary to adapt all the tests and questions to the level of participants, drawings and fewer questions can be used for some groups.</p>

Annexes:

Annex 1


Game board of the Energy Snakes and ladders



La oca de energía = The energy Snakes and ladders
 De molino a molino = From mil to mill
 Ahorra energía = Saveenergy
 Muerte = Death
 1 turno sin jugar = Miss a turn
 Quederrroche = What a waste!

Annex 2


Exercise Cards



CHARADE

Hot water is a quarter of the total energy consumption of a home. It is the second biggest energy consumer, after the heating. You can save energy washing the dishes with cold water and wearing gloves.


Show to your teammates:
WASH THE DISHES



CHARADE

Did you know that in the stand-by mode TV consumes up to 15% of energy it consumes when turned on?


Show to your teammates:
GHOST CONSUMPTION



CHARADE

Each year, before starting to use the heating, you must bleed the radiators. It is a very simple operation that improves the functioning of our heating system.


Show to your teammates:
BLEED THE RADIATORS



CHARADE

Renewable sources of energy, for example sun, wind and geothermal, are the ones that can be used permanently, as they are inexhaustible.


Show to your teammates:
HYDROELECTRIC ENERGY



CHARADE

For every degree we increase the temperature, the energy consumption increases by 7%. If you're feeling cold, first try putting on a sweater.

Show to your teammates:
PUTTING ON A SWEATER



CHARADE

The energy efficiency label is an informative tool you can use when you are buying electric appliance. There are 7 classes of energetic efficiency, ranging from red F to green A.


Show to your teammates:
ENERGY EFFICIENCY



CHARADE

At night, turn off the heat. In the morning do not turn it on until you have finished ventilating the house. If the house is empty in the morning, you only have to keep the thermostat at 15-17^o C.

Show to your teammates:
SWITCH OFF THE HEATING



CHARADE

Renewable sources of energy, for example sun, wind and geothermal, are the ones that can be used permanently, as they are inexhaustible.

Show to your teammates: **WIND ENERGY**



CHARADE

The price of the energy an electric appliance consumes during its lifetime can be much bigger than its price. Choose electric appliances from the A class to reduce your electricity bill.

Show to your teammates:
ELECTRICITY BILL



CHARADE

From the total energy consumed in the world, only 17% comes from renewable sources.

Show to your teammates:
RENEWABLE ENERGIES



CHARADE

Renewable sources of energy, for example sun, wind and geothermal, are the ones that can be used permanently, as they are inexhaustible.

Show to your teammates: **SOLAR ENERGY**



CHARADE

In UK, the transport energy consumption has increase from 19% in 1990 to 37% in 2010. Nowadays, the transport represents the highest consumption of energy in the country.

Show to your teammates: **TRANSPORT**



CHARADE

With conventional pans, you can save up to 65% energy with the simple gesture of using the lid.

Show to your teammates:
COVER POTS AND PANS WITH A LID



CHARADE

Washing machine and dishwasher represent up to 5% and 4%, respectively, of household energy use. Using the ability of washing machines and dishwashers fully, avoid their unnecessary use.

Show to your teammates:
USE OF APPLIANCES AT FULL LOAD



CHARADE

One way to avoid ghost consumption of energy of several appliances at the same time, is by using a multiple power strip with switch.

Show to your teammates:
MULTIPLE POWER STRIP



CHARADE

In UK, the domestic energy consumption has increase from 25% in 1990 to 32% in 2010. Nowadays, the domestic sector represents the second highest consumption of energy in the country.

Show to your teammates:
DOMESTIC CONSUMPTION OF ENERGY



CHARADE

From the total energy consumed in the Close the shower while you are soap making. You'll save a lot of hot water.

Show to your teammates: **CLOSE THE SHOWER**



CHARADE

Lighting represents up to 17% of household energy use. Do not leave lights on in rooms that are not being used.

Show to your teammates: **SWITCH OFF THE LIGHTS**



CHARADE

Computing represents up to 8% of household energy use. Turn off the monitor if you aren't going to use your PC for more than 20 minutes and both the CPU and monitor if you're not going to use your PC for more than 2 hours.

Show to your teammates: **COMPUTER**



CHARADE

Install aerating, low-flow faucets and showerheads –available at home improvement stores– to reduce your hot water use.

Show to your teammates: **LOW-FLOW SHOWER HEAD**



DRAWING

Look for ENERGY STAR-qualified TVs. They're up to 30 percent more efficient than noncertified models.

Show to your teammates: **TV**



DRAWING

One way how to save energy is to design houses that allow their habitants to use the natural light as much as possible. The natural light is free and does not emit any CO₂.

Draw to your teammates: **NATURAL LIGHT**



DRAWING

The stand-by or ghost consumption can represents up to 5 % of the electrical bill in a house.

Draw to your teammates: **STAND-BY**



DRAWING

The 60% of the consumption of energy in houses in the UK is used for heating.

Draw to your teammates: **HEATING.**



DRAWING

The fluorescent tubes have a higher consumption when turned on, but this only lasts fractions of a second, so it's better always to turn them off.

Draw to your teammates:
TURN OFF FLUORESCENT TUBES.



DRAWING

When building or rehabilitating a house, good insulation is the best investment. You gain in well-being and save money on heating.

Draw to your teammates: **INSULATION**



DRAWING

Raise the temperature slowly to keep your bill lower. Quickly raising your heat pump's temperature activates the heat strip, which uses tons of energy.

Show to your teammates: **THERMOSTAT**



DRAWING

LED bulbs save up to 90 % energy and last up 12 times longer than incandescent bulbs.

Draw to your teammates: **LED BULBS**



DRAWING

More than 60% of the electrical energy consumed in the UK comes from fossil fuels.

Draw to your teammates: **FOSSIL FUELS.**



DRAWING

A shower consumes, on average, a quarter of the water and energy required for the bath. Choose the shower instead of the bath.

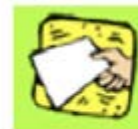
Draw to your teammates: **SHOWER**



DRAWING

There's a system that can cut by half the loss of heat when compared to single-pane windows. At the same time it reduces drafts, condensation and frost.

Draw for your teammates:
DOUBLE GLAZED WINDOWS



DRAWING

The pressure cooker is a fast and very effective way of cooking. Use it, all the advantages are there!

Draw to your teammates:
PRESSURE COOKER.



DRAWING

Curtains and blinds reduce heat loss, preventing it from escaping through the windows. Close blinds and curtains at night.

Draw to your teammates: **CURTAINS**



DRAWING

Nuclear waste is highly toxic, and needs to be safely stored for hundreds or thousands of years. Leakage of nuclear materials can have a devastating impact on people and the environment.

Draw to your teammates: **NUCLEAR POWER STATION**



DRAWING

In most mixer taps, when the lever is left in central position a mixture of hot water and cold water is obtained. If the tap is opened in that position for a short period of time the hot water does not even get to the tap. If you do not need hot water, be sure to turn on the tap in cold position.

Draw to your teammates: **MIXER TAPS**



DRAWING

For every degree we increase the temperature, the energy consumption increases by 7%. Turn down the hot water to 60°C.

Draw to your teammates: **WATER HEATER**



DRAWING

Set your computer to sleep or hibernate mode instead of using a screen saver.

Draw to your teammates: **COMPUTER**



DRAWING

Heating water uses a lot of energy. We tend to boil twice as much water as we use. Only boil as much water as you need, you could save up to £70 per year.

Draw to your teammates: **KETTLE**



DRAWING

The fridge is the appliance with the highest consumption of energy in a house. Thaw the products by placing them in the refrigerator the night before, you will save energy.

Draw to your teammates: **THAW FOOD IN THE FRIDGE**



DRAWING

Remember to unplug your mobile phone charger when you're not using it. Believe it or not, it also consumes energy.

Draw to your teammates: **MOBILE PHONE CHARGER**



QUESTION

Between 80 and 85% of energy consumption of a washing machine is used for...

- Heating the water
- Spin-dry the clothes
- Laundry the clothes



QUESTION

When we open the door of the fridge for 10 seconds, the fridge needs _____ minutes to get the same temperature as before.

- 40 minutes
- 10 minutes
- 20 minutes



QUESTION

Cooking with the pot covered saves _____ % of energy.

- 5 %
- 15 %
- 20 %



QUESTION

Energy saving lamps save up to _____ % energy and last up _____ times longer than incandescent bulbs.

- 60 %, 8 times longer
- 80 %, 8 times longer
- 80 %, 4 times longer



QUESTION

LED bulbs save up to _____ % energy and last up _____ times longer than incandescent bulbs.

- 90 %, 8 times longer
- 80 %, 10 times longer
- 90 %, 12 times longer



QUESTION

Between 80 and 85% of energy consumption of a washing machine is used for...

- Heating the water
- Spin-dry the clothes
- Laundry the clothes



QUESTION

The stand-by or ghost consumption, represents up to _____ % of energy consumption of turned on device.

- 25%
- 15%
- 2%



QUESTION

A temperature between _____ °C is sufficient to be comfortable at home. In the bedrooms that temperature should be lowered by about _____ °C.

- Between 21-24 °C, 3 °C
- Between 19-21 °C, 3 °C
- Between 19-21 °C, 1 °C



QUESTION

Proper maintenance of the heater can result in savings up to ____ % of energy.

- 15 %
- 20 %
- 5 %



QUESTION

Through the windows occurs about ____ % heat loss.

- 10-15 %
- 15-20 %
- 25-30 %



QUESTION

Between 80 and 85% of energy consumption of a washing machine is used for...

- Heating the water
- Spin-dry the clothes
- Laundry the clothes



QUESTION

Every time you open the oven, it loses at least ____ of the energy accumulated inside it.

- 20 %
- 33 %
- 10 %



QUESTION

For every degree we increase the temperature, the energy consumption increases by ____ %.

- 7 %
- 15 %
- 2 %



QUESTION

The use of a microwave oven instead of conventional oven allows ____ to be saved

- 20-30 % of energy
- 60 -70% of energy
- 40-50% of energy



QUESTION

Small improvements in insulation may result in up to ____ % in energy savings on heating.

- 10 %
- 30 %
- 15 %



QUESTION

How many minutes do you think is enough to ventilate the house in winter without loose so much heat?

- 30 minutes
- 5 minutes
- 10 minutes



QUESTION

In general it could be said that electric cookers are less efficient than the gas ones.

- True
- False



QUESTION

An energy-efficient tumble dryer could save you more than £__ per year.

- £30 per year
- £70 per year
- £150 per year



QUESTION

A shower consumes, on average, a ____ of the water required for the bath. Saving water is also saving energy.

- third
- quarter
- half



QUESTION

The fridge consumes approximately the ____ % of the energy in a house, but it is the appliance which consumes the most, about ____ %.

- 10%, 30 %
- 5%, 10 %
- 8 %, 30%



QUESTION

You could save up to £____ a year on your electricity bill by opting for an energy-saving dishwasher.

- £25 per year
- £70 per year
- £40 per year



QUESTION

Replacing 10 incandescent bulbs with LEDs, we can save £____ each year (assuming that they are working about 5 hours per day).

- £ 120
- £ 50
- £ 200

Activity 2

ACTIVITY 2	
PARTNER ORGANISATION	Asociación Columbares (adapted from a game initially proposed by Cabildo de Tenerife).
NAME	What does this has to do with the water?
TOPIC	Water.
TYPE	Workshop.
DURATION	30 min.
TARGET GROUP	Children (12+), youngsters and adults. People with learning difficulties.
MATERIALS	A bucket with objects related to water consumption or their images.
OBJECTIVES	To educate participants on our water consumption. To reflect on behaviours that promote water savings or, on the contrary, increase it.
DESCRIPTION	The educator invites participants to sit in a circle around a cube that contains a series of objects. The educator invites participants to extract objects and discuss their link with the water consumption. The educator invites the next participant to explain the object and helps/corrects him/her if necessary. Repeat until all the objects are discussed. The possible content of the bucket can be found in Annex 1.
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	In the case of groups with special needs or with little previous knowledge on the subject, the tutor / monitor can help to establish the relationship of each object with water.

Annexes:

Annex 1

	OBJECT	EXPLANATION
1	Aerator	Saves up to 50% of water, easy to install, cheap.
2	A roll of toilet paper	Harmful. Can clog the pipes and makes the water treatment more difficult. Remember that the toilet is not a trash bin and the less you put in it the better.
3	A bottle of bleach	Harmful, highly contaminating. Alternative for cleaning: vinegar and / or baking soda.
4	A bottle of oil	Harmful. Complicates and pollutes the water purification. It's important to never throw it down the sink. You should take it to the recycling centre, put it in with regular garbage or make soap from it.
5	A flow restrictor for the shower	Beneficial. Helps save up to 50% of water, easy to install, cheap. In general, we can compare shower vs. a bath: a bath uses 150 litres, while a shower, if we close the tap while soaping, uses around 50 litres (half of it with Low-Flow Showerhead or flow restrictor).
6	An image of a leaky tap	Harmful. If a tap is dripping, we lose 2-10 litres of water every day.
7	Water Bottle (0.5 l or 0.75 l)	Beneficial, as filled with water or sand, it is a homemade device for water saving in the toilet (when placed in the toilet tank). It can also be seen as harmful, as it takes water to produce it, and there are many issues related to bottled water in general.

- | | | |
|----------------------|--|---|
| 8 | Bag for the toilet tank | Beneficial. Filled with water, it is a device for saving water when using toilet. |
| 9 | Razor for shaving | If we do not close the tap when we shave, we spent about 55 litres. If we fill the sink with water or open the tap only when we need it, about 5 litres are consumed. |
| 10 | Drawing of a dishwasher | Beneficial. Dishwasher saves energy and water, but you must fill it completely. Washing dishes by hand can consume up to 100 litres. If you wash your dishes by hand, turn off the tap while soaping (saves of up to 50 litres). |
| 11 | Low-Flow Showerhead | Beneficial. Saves up to 50% of water and energy. In general, we can compare shower vs. a bath: a bath uses 150 litres, while a shower, if we close the tap while soaping, uses around 50 litres (half of it with Low-Flow Showerhead or flow restrictor). |
| 12 | Toothbrush | Close the tap while you brush your teeth. If we brush our teeth with the tap opened, we lose about 20 litres of water. With the tap turned off, we use only 1 litre. |
| 13 | Garbage bin | Beneficial. Minimizes the number of times we flush the toilet. With old cisterns, every time we flush it, we spend 10 to 15 litres of drinking water. Using modern cisterns with two buttons, with the small flush we spend about 5-6 litres, which is still more than not flushing at all. |
| 14 | An image of washing machine | Spend less that when washing by hand, if we load it full. |
| 15 | An image of car being washing with a hose | When washing the car with a hose, we spend about 500 litres. With buckets and sponges, we spend about 80 litres. |
| 16 | An image of a watering can | We should water our plants at late evening/night or in the early hours of the morning. |
| 17 | An image of washing one's hands | Close the tap while soaping. If we wash our hands with the tap open, about 20 litres of water are lost. With the tap turned off, only 1 litre. |
| THE LAST ONE. | | |
| 18 | Bucket | Beneficial. You can use it to collect the cold water while waiting for the hot water to come in the shower. |

Activity 3

ACTIVITY 3	
PARTNER ORGANISATION	Asociación Columbares.
NAME	Choose your menu... and something else.
TOPIC	Sustainable consumption.
TYPE	Role-play.
DURATION	40 min.
TARGET GROUP	Youngsters (14+) and adults. Collectives with learning difficulties.
MATERIALS	Laminated work sheets with menus and additional food information for the experts. Big sheets of paper, markers. If possible, some identification signs for restaurants (apron, chef's hat) and experts (goggles, lab coat...).
OBJECTIVES	To analyse our consumption and its environmental and social consequences. To think about the importance of knowing the origin of the food we eat.

The participants are divided into various groups:

- Restaurants: Three restaurants will promote their menu (Annex 1). Restaurants can be represented by one or two people, depending on group size.
- Friends: At least two groups of friends (ideally three, but this will depend on the size of the group) who will select a menu from the restaurants and analyse its environmental and social consequences. Groups of friends can be represented by 5-6 people, depending on group size.
- Experts: One group, which has information on menu items and their social and / or environmental consequences; there should be at least one person for each food description (Annex 2).

The activity:

DESCRIPTION

- First step: the restaurants speak. Each restaurant receives one menu and has to sell it to the groups of friends.
- Second step: the groups of friends speak. With the information provided by each restaurant, friends choose the menu that suits them (in this part they do not know the opinion of experts yet).
- Third step: the experts get involved. Friends should think about the environmental and social consequences of the menus and ask the experts opinion. Each expert has a card with information on one (or more) of the foods and give the summary of the information.
- Fourth step: the friends, with information from the experts, must decide whether to stay with the initially chosen menu or change it.

Finally a common discussion takes place and the participants are provided with guidelines for more sustainable food consumption.

COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS

To adapt the Annex to your local situation / products, and the eating preferences of the group (no pork, vegetarian food, etc.)

To adapt the questions in a simple language for groups with special needs.

To reduce the amount of information given (especially by experts) in case of groups with special needs.

In case of groups with special needs or with little knowledge on the subject, the discussion can be guided or encouraged by the educator.

Annexes:

Annex 1

Examples of menus



Note: menus are adapted to the Region of Murcia, Spain. Each region/country must choose local foods.

Annex 2

Information on environmental and social effects of the food

Almonds

Almond sector in Murcia is in critical condition. From 2005-2009 the prices paid to the growers have fallen by 58%. Competition from California in the US, the largest almond producer in the world, is one of the main causes of this situation. The majority of fields, will be soon “unfeasible”.

There are currently more than 10,000 almond farms in the region, which add up to 70,600 ha. It is the most extensive cultivated area of the whole community and it includes a specific way of life and traditional landscape in our fields.



Borges

Fried an salted almonds from California

200 gr.

Price: 3,28 €



Campo Nubla, S.L.

Ecological almonds from Murcia.

1.000 gr.

Price:

- Big ones whole: 11,44 €
- Big ones peeled: 14,56 €

NOTE: You can buy them online



Ecoato

Ecological almonds from Murcia

250 gr.

Price: 3,16 €

Lentils

Lentils have a high content of fibre and protein, but their cultivation has been reduced and they are being replaced by more competitive products.

On the one hand, the farmers have seen how their soil has lost nitrogen and chose to use higher amounts of fertilizer, even when lentils are very good at fixating nitrogen in the soil. In the same time there are more and more lentils coming from Turkey and, especially, Idaho lentils -the American lentils – so called “quick” lentils, in multiple colors, well presented and having the same size.

However, the traditional lentils in our food (rubia de la Armuña, rubia castellana, pardina Franciscana and verdina) lentils are tastier, richer in fiber and proteins and more tender. However, even our traditional varieties are

beginning to be cultivated in other countries (including the US). For this reason, it is not only important to choose local varieties, but read the labels to know where these varieties have been cultivated as well, since it may come from other countries, contributing to impoverish our farmers in particular and our labor market in general and contributing to increase greenhouse gases emissions associated with transportation.

A multitude of varieties -adapted to very different local environments- have obtained resistance to different pests and have been selected for centuries, have disappeared or are at risk of doing so. In its place are emerging commercial varieties, perhaps better presented to the public.



El Hostal
Brown lentils extra.
1 kg.
Price: 2,35 €



El Hostal
Quick lentils extra.
1 kg.
Price: 2,70 €



Rincón del Segura
Ecological Brown lentils
1 kg.
Price: 3,46 €

Nile perch and Pangasius

Nile perch:

Many people from Uganda, Kenya and Tanzania traditionally lived from fishing in Lake Victoria (lake surrounded by these three countries). The men fished different kinds of fish and women smoked or dried them and sold them in local markets, in which the families themselves controlled the prices.

Perch was introduced in the lake in the 60's. In the 80's the exporting firms installed in the shores of the lake and started to export perch to Europe. Many fishermen began working for these companies and as a result, they lost their own fishing equipment and their capability to compete. Even those who continue to fish on their own, sell fish to middlemen at very low prices, as now the prices are set by intermediaries, not by the fishermen. Women have lost their jobs because they no longer have fish to sell. Some work in bars for the pilots exporting fish; and AIDS is spreading easily. The number of families dependent on industries has increased and although the townspeople fishing and processing the fish has dropped and they no longer have access to the fish. Hunger is spreading, but the townspeople can no longer pick up the remains of processing perch, because they are used to make fishmeal, which is also exported.

The lake is no longer the same. The surroundings have been deforested for the installation of industries that generate contamination, and perch, as they are aggressive

and hungry fish, have brought more than 200 of the 300 species of local fish to extinction. As a consequence of this increased poverty, there's an armed conflict between the three countries surrounding the lake for the appropriation of the remaining fishing business. In fact, the same vessels that bring fish for sale to Europe are sometimes used to transport weapons from Europe to these countries, fueling these armed conflicts.

In some European supermarkets, analysis have found traces of heavy metals in concentrations harmful to health.

Pangasius:

90% of the Panga we consume in Europe come from the Mekong River in Vietnam. The rapid fattening of these fish is achieved by feeding them fishmeal, soy, cassava and vitamins. They breed in high population density.

The benefit of the business goes to the few entrepreneurs who buy live fish from the breeders, clean it, freeze it and resell it to European wholesalers.

Local workers receive very low income and work in demanding conditions with very low wages and high productivity. This exploitation has serious environmental impacts: water is contaminated by drugs (antibiotics and hormones), administrated due to the high density of fishes. It also causes overfishing in other areas to produce fishmeal. Transport to Europe generates considerable CO2 emissions.



Perch

Price per kg: 8,25 € (Alcampo).



Pangasia

Price per kg: 4,99 € (Alcampo).

Atlantic Cod and Red mullet

Atlantic Cod:

Spain is one of the largest consumers of fish in the world; however such species as Bluefin Tuna, Anchovy and Cod are disappearing from our plates. This is due to overfishing, illegal fishing and other destructive practices, which are depleting the resources and destroying our oceans. In Europe over 80% of fisheries are overexploited or depleted. Meanwhile, aquaculture can only contribute to the production of sustainable seafood if it meets strict environmental criteria. Aquaculture or growing of specific species causes serious environmental problems and contributes to the depletion of fish stocks.

Cod stocks have been suffering a great overfishing on both sides of the Atlantic. The main fishing areas of the Northwest Atlantic have been and continue being overexploited. The two Canadian populations are at such low levels that they are classified as endangered. In the northeast Atlantic, most stocks are in a critical situation and all are classified as over exploited or at risk of being exploited unsustainably, except Iceland and the Barents Sea (Arctic Northeast) which are better managed. Moreover, the cod fishing with bottom trawling damages the seabed and has a high rate of bycatch of other species which are discarded at sea, often dead or dying.

Red mullet:

The Red mullet lives in shallow sandy areas and close to the seaweed meadows of the endemic plant of the Mediterranean Sea *Posidonia oceanica*, which forms “underwater forests and meadows”. It is caught with gillnets (artisanal fishery method) between the months of April and September. Artisanal fishing has the following advantages over industrial fishing and other types of more aggressive fishing methods:

- This is a local and ancestral fishing, benefitting the local economy.
- As the name states “artisanal” fishing are a work of art and forms part of the historical and cultural heritage of the local people.
- It is sustainable: The catches, as well as fuel consumption are much lower than those of industrial vessels. The consumption’s ecological footprint is lower, because local products are eaten, instead of products coming from afar.
- The fishermen are changing gear and target species throughout the year. This alternation allows the other species of commercial interest to carry out their life cycles and not suffer any fishing pressure at certain times of the year.
- It is a professional fishing conducted nearby, so we can enjoy extremely fresh seafood.



Atlantic Cod

Price per kg: 9,80 € (market).



Red mullet

Price per kg: 14,60 € (market).

Coffee

Coffee is the second largest commodity in the world after oil. Spain consumes 200 million kilos of coffee each year. Its price is set at the stock markets in New York and London and it has significant volatility. It is estimated that each year the market of coffee generates 52,000 million euros, mostly controlled by five major companies. Only 10% of this income goes back to the producers. The rest stays in the hands of intermediaries.

For example, the Ethiopian coffee, great quality coffee which is often sold in the North at a high price (you can pay even 15 euros per kilo) is produced by 1.2 million farmers who receive less than 2 euros a day for their work.

Moreover, the International Labour Organisation estimates that child labour accounts for around 10% of people working in the coffee plantations.

Fair-trade guarantees a stable income for the producer groups higher than the regular market price. A study of the French Platform for Fair Trade concluded that with this alternative system farmers receive 17% of the final sales price, whereas in the conventional trade it stays at 5%. Fair Trade ensures that no child work is used in the production.

Does this mean that the final price of Fair Trade products is higher? Not necessarily. There is an increase in the margin of the final price that the producers receive, but the number of intermediaries and advertising costs are reduced, and the other actors renounce enormous profit margins to compensate the higher price paid for the producers. A fair price is not necessarily a higher price for those who consume but a worthy price to the producer in origin. A price which ensures that no one has suffered for others to enjoy a good coffee.



Marcilla
Natural ground coffee
250 gr.
Price: 2,15 €



Saimaza
Mixed grounded coffee
250 g.
Price: 2,14 €



Altercafé
Coffee coming from small producer cooperatives in Africa and South America.
250 gr.
Price: 2,81 €
NOTE: It can be bought online.

Wine

The cork oak is one of the great symbols of the natural wealth of the Mediterranean basin. The cork oak covers an area of 2.7 million hectares in the Western Mediterranean, distributed unevenly between Portugal, Spain, France,

Italy, Morocco, Tunisia and Algeria. Since time immemorial, man has used natural resources offered by this unique ecosystem to build an operating system that combines livestock, agriculture and forestry.



Currently, more than 100,000 people still have the cork oak as their main source of income, especially with jobs linked to the cork industry. The most important economic activity linked to cork is making corks for wine and other beverages. This is the use of some 85% of the cork obtained in Spain. Over 15 million corks are produced annually in the world. Just over half of them are made from cork from the Iberian Peninsula, thus Spain and Portugal are the main cork producers in the world. Only in Spain there are currently over 600 registered companies working in this sector, employing around 3000 people. Preserving

the cork production, besides maintaining a sustainable economic activity, protects the unique habitats that act as a refuge for some of the most endangered species in the Peninsula and the Mediterranean in general.

If the wine companies stop using cork, up to two million hectares of cork oak would be left in the risk of forest fires, desertification or conversion to other uses. No fewer than 50,000 people, including employees of the cork sector and forest workers, could lose their occupation/job, many of them in areas of particularly fragile and precarious economic environment.



Sabatacha
Red wine, cork
Denomination of Origin: Jumilla
Bottle of 75 cl.
Price: 4,09 €



Las Reñas
Ecological red wine, cork.
Origin: Bullas.
Bottle of 75 cl.
Price: 4,89 €



Luberrí
Red wine, plastic
Denomination of Origin: La Rioja
Bottle of 75 cl.
Price: 5,65 €

Coca-Cola

On the coast of the Brazilian state of Pernambuco, a group of fishing families are struggling to regain their homes in the sanctuary of Sirinhaém river.

In 1998, 53 families were expelled from the mangrove forest where they had lived for decades and from which they got their food and income, due to the installation of the sugar refining plant Ursina Trapiche.

According to the communities and their advocates, Trapiche began destroying their homes and small farms without any provocation, even threatened them with violence and destruction unless they left the islands.

Trapiche resettled families in the village of Sirinhaém, where they have access to electricity, water, sanitation and education. However, transfer has brought many difficulties. Families live in favelas and if they want to fish, they have to go a long way to reach the mangroves.

Living in the village is expensive, and as they have lost their own land, some families have to resort to wage labor to pay for their food and other basic needs, often cutting sugar cane for Trapiche.

In 2009, the rights on the reservation were granted to the evicted families, but the state has not yet approved it, which many attribute to political influence of Trapiche and

the sugar industry in general.

Coca Cola has confirmed that it uses sugar from Ursina Trapiche for developing their products.

Currently, Coca Cola faces allegations of child labor in its supply chain in the Philippines as well.

Most recently, the company has committed to take steps to end the land grabbing in its supply chain after almost 225,000 people signed a petition and took actions requiring food and beverage companies to respect the land rights of local communities. These actions are part of Oxfam's campaign *Behind the Brands*.



Fair trade Cola
Price: 1,10 € (Oxfam)

Activity 4

ACTIVITY 4	
PARTNER ORGANISATION	Asociación Columbares (adapted from a game initially proposed by CEA Polvoranca).
NAME	How do you move?
TOPIC	Sustainable mobility.
TYPE	Game.
DURATION	20 min.
TARGET GROUP	Children (10+) and adults. Groups with learning difficulties.
MATERIALS	3 big dice and table of conversion (Annex 1).
OBJECTIVES	To learn and discover in a playful way the importance of bicycle in our daily commute. To raise awareness on the excessive and unnecessary use of cars in cities.
DESCRIPTION	<p>The activity consists of a simulation of a race between pedestrians, bicycles and cars; the first one arriving at the end, wins. The activity aims to represent the actual situation of coexistence between pedestrians, bicycles and cars in urban areas.</p> <p>The methodology of the activity is the following:</p> <p>The group is divided into 3 subgroups: pedestrians, bicycles and cars. The division can be done fairly or employ the proportion considered more faithful to reality.</p> <p>Then, the three groups are placed in an imaginary start line.</p> <p>Each group is rolling the dice when it's their turn and advances the corresponding number of steps according to conversation template which is read out loud by the monitor (Annex 1). The first one arriving at the end, wins.</p> <p>The conversion template provided is designed for bicycles to win.</p> <p>It can be modified to include other actions, other means of transport, etc.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	The educator can make the distance from start to finish shorter. The participants can move more steps on each spin to make the game quicker.

Annexes:

Annex 1

Table of conversion:

	1	2	3	4	5	6	
Pedestrians	You're moving on One step forward	You go into a shop Stop	You catch the bus Three steps forward	Red light Stop	You meet a friend Stop	You're moving on One step forward	5
Cyclists	Red light Stop	You're moving on Two steps forward	You're moving on One step forward	Stop sign Stop	Bicycle lane Three steps forward	You meet a friend Stop	6
Drivers	Stop	Stop		Stop	Stop	Back	3

Activity 5

ACTIVITY 5	
PARTNER ORGANISATION	Consorzio abn.
NAME	Lemon Battery
TOPIC	Energy.
TYPE	Game/scientific experiments.
DURATION	30 minutes.
TARGET GROUP	Children (6+ years) and adults. Groups with learning difficulties.
MATERIALS	Small strips of copper wire and zinc, led, lemons and crocodile clips.
OBJECTIVES	To demonstrate, through a game oriented approach, that energy is everywhere. The electricity produced by lemons will help educators to introduce a reflection session on the meaning of renewable and sustainable energy.
DESCRIPTION	<p>The participants are divided into small groups (preferably 4 people per each group). Each group receives the material.</p> <p>The trainer will explain each step for conducting the experiment and students will follow each step.</p> <p>The process must be implemented very carefully for the success of the experiment. Each lemon battery, in fact, will light on a small led.</p> <p>The trainer gives 4 Lemons (with 2 small cuts on each lemon extremity), 5 crocodile clips of different colors, 4 small strips of copper wire and 4 zinc screws. In each lemon students will insert 1 small strip of copper wire, 1 zinc screw and then they connect all lemons using 5 crocodile clips. In this way they will create a closed electricity circuit putting at the end the small led light that will illuminate.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	<p>You have to prepare all the materials and be careful in making students aware that each step must be perfectly implemented.</p> <p>Also it is recommended to previously make the small cuts on lemons with a cutter.</p> <p>In some cases, the batteries may not work because of the delicate and fragile electricity circuit. In this case you should try again by changing the led or replacing the crocodile clips.</p>

Activity 6

ACTIVITY 6	
PARTNER ORGANISATION	Consorzio abn.
NAME	Measuring pH values of water.
TOPIC	Water.
TYPE	Game/scientific experiments.
DURATION	30 minutes.
TARGET GROUP	Children (6+ years) and adults. Groups with learning difficulties.
MATERIALS	Bicarbonate or lemon.
OBJECTIVES	To reflect about the following topics: water as a limited resource, how to reduce water consumption. The activity will help educators to demonstrate the difference between salt water and tap water. The specific objective is to discuss the meaning of reducing water consumption in households and schools.
DESCRIPTION	The participants are divided into small groups (preferably 4 people per each group). Each group receives the material. The trainer will explain each step for conducting the experiment and students will follow each step. By using the litmus paper, students will 'display' levels of acidity of different water solutions. Firstly, the trainer will fill in glasses with tap water and students will measure its pH value by immersing a first strip of litmus paper. Then, the trainer will add some salt into the water solution and students will measure the new pH value; after that, the trainer will 'create' a very acid water solution by adding drops of lemon juice (or bicarbonate) and students will measure the last pH value. Litmus paper changes its color when immersed in different water solutions. Students will observe the results obtained and make reflections.
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	The experiment is useful for 'displaying' the general difference between salt water (typical of seas and oceans) and tap water we use in our daily life. This experiment can represent a valid and easy tool for better explain the importance of saving water, a limited resource.

Activity 7

ACTIVITY 7	
PARTNER ORGANISATION	Consorzio abn.
NAME	Measuring water temperature.
TOPIC	Sustainable consumption.
TYPE	Game/scientific experiments.
DURATION	20 minutes.
TARGET GROUP	Children (6+ years) and adults. Groups with learning difficulties.
MATERIALS	3 plastic glasses, wool, cardboard, plastic (i.e. freezer bags), aquarium thermometer.
OBJECTIVES	To discuss the meaning of responsible consumption. In particular, the meaning of reducing heat loss and the specific devices for reducing energy consumption in households and schools.
DESCRIPTION	<p>The participants are divided into small groups (preferably 4 people per each group). Each group receives the material.</p> <p>The trainer will explain each step for conducting the experiment and students will follow each step.</p> <p>The trainer will fill in glasses with hot water, by using the aquarium thermometer students will measure the temperature of each glass and note it on a memo book.</p> <p>Each glass will be wrapped up with three different materials for discovering the difference in reducing heat loss.</p> <p>The glass number 1 will be wrapped up with wool, the glass number 2 with cardboard, the glass number 3 with plastic (freezer bag).</p> <p>After a few minutes, students will measure for a second time the temperature of each glass and make reflections.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	<p>Cardboard is the more insulating material but the experiment is very flexible in terms of results. In fact, students may obtain different temperatures due to different levels of hot water and different ways of wrapping up the glasses with materials.</p> <p>Trainers should make reflections even if results are not homogeneous, focusing on the human choices for reducing energy consumption and heat loss.</p>

Activity 8

ACTIVITY 8	
PARTNER ORGANISATION	Consorzio abn.
NAME	Let's create a recipe!
TOPIC	Sustainable consumption.
TYPE	Game.
DURATION	15 minutes.
TARGET GROUP	Children (6+ years) and adults. Groups with learning difficulties.
MATERIALS	In season food Calendar.
OBJECTIVES	To discuss the meaning of responsible consumption, including fair trade, local production, fresh food, in-season food.

The activity can be done individually or in group. It could be useful also to ask for the participation of students' parents.

Each student receives an 'In Season Food Calendar'.

DESCRIPTION

The trainer will explain briefly the structure of the Calendar and ask students to prepare a meal using only the in season food included in the calendar and make reflections.

The activity is useful for analyzing the topics of fair trade, local production, fresh food, in-season food.

COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS

If the trainer decides to make the activity individually, it could be useful to ask the support of students' parents in the creation of the recipe.

Annexes:

Annex 1

Example of 'In Season Food Calendar':

	GEN	FEB	MAR	APR	MAG	GIU	LUG	AGO	SET	OTT	NOV	DIC
Aglio												
Asparagi												
Barbabietole												
Bietola da costa												
Carciofi												
Carote												
Cavolfiore												
Cavolo broccolo												
Cavolo cappuccio												
Cavolini Bruxelles												
Cavolo verza												
Cetriolo												
Cipolla												
Fagioli												
Fagiolini												
Fave												
Finocchio												
Insalata												
Melanzana												
Peperone												
Piselli												
Pomodori												
Porri												
Prezzemolo												
Radicchio												
Ravanello												
Sedano												
Spinaci												
Zucca												
Zucchine												

Activity 9

ACTIVITY 9	
PARTNER ORGANISATION	Insider Access and Asociación Columbares (adapted from a game initially published by the project Local Footprints developed by WWF Scotland and Sustainable Scotland Network).
NAME	UN Climate Change Conference.
TOPIC	Climate Change.
TYPE	Discussion - debate.
DURATION	Max. 45 minutes.
TARGET GROUP	Adults. Groups with learning difficulties, including prisoners, ex-offenders and learners with mental health issues.
MATERIALS	Conference participants role play sheets and associated worksheets.
OBJECTIVES	To consider the impact and issues around climate change.
DESCRIPTION	<p>The steps to develop the activity are the following:</p> <ol style="list-style-type: none"> 1. Divide the class into 8 groups and give them a role. 2. Introduce the scenario: <i>The next UN Climate Change conference will agree that all countries should commit to reduce emissions by 2050. Targets will be set for 2020, 2030 and 2040 and these targets will be different for each country.</i> <i>As a result of the historic responsibility which the UK has in causing high concentrations of CO₂ in the past, the UK target of reducing emissions by 80% by 2050 is higher than many other countries.</i> <i>The UK delegation needs a referendum from the public - will you be prepared to support the UK government in helping to reduce emissions by a larger percentage than many other countries?</i> <p>YES or NO</p> <ol style="list-style-type: none"> 3. With the viewpoints (annex 1) and the character worksheets (annex 2) the groups have to prepare their arguments to convince the general population to vote YES or NO (regard to their interests). 4. Do the public vote.
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	The debate can be amended to the academic level of the group, or to current high profile debaters on climate change.

Annexes:

Annex 1

View points.



My name is Tara Begum. The area where I live in Bangladesh is always flooded during the monsoon season, making it impossible to grow crops. These floods have become worse in recent years. We used to only get one flood a year, but now two or even three floods can happen. People have told me that this is due to climate change. I don't know why this is happening but they said it's due to people in rich countries burning lots of coal, oil and gas in their industries for the last 150 years.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- If it is true that people in rich countries have helped to cause climate change, what do you think these countries should be doing to prevent further damage?
- Is it important for organisations to help you to adapt to these devastating floods?



My name is Paul and I own a carbon offsetting company called 'carbonoffset.com'. We help to pay for the carbon dioxide emissions caused by each of our everyday actions e.g. taking holiday flights, driving our cars, heating or cooling our homes by planting trees or supporting renewable energy projects in developing countries.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- You said that you plant trees to absorb the carbon dioxide generated by people's actions. But, trees take so long to grow, so how can this be an effective method of combating climate change?
- What percentage of the money paid goes to your company each time someone buys carbon offsets?



from China. My country is a rapidly industrialising country and the international community should respect our right to develop. Rich countries are responsible for most of the greenhouse gases produced over the past century, and have an 'unshirkable responsibility' to do more to tackle the problem.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- Is it still the UK's and USA's responsibility to reduce their emissions the most even though China is the world's largest emitter?
- It doesn't seem fair that so many emissions in China are caused by producing goods for other countries. Surely the UK and the USA should include emissions caused by shipping and flying goods from China in their own emissions figures?
- It has been reported that China is building a coal-fired power station each week. How should China try and reduce its reliance on coal?
- Should countries like the UK and USA provide economic backing for China to develop more renewable technology?



My name is Dr Rajendra Pachauri and I am the Chairman of the Intergovernmental Panel on Climate Change (IPCC) which is the organisation committed to scientific research on climate change.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- Do you truly believe that climate change has been made worse by humans?
- You said that a cut of more than 50% is needed. Don't we need a reduction of at least 60% or 80%?
- You also said that this reduction should happen before 2050, but isn't this too late?
- Do you think that countries like the UK and the USA should promise to reduce emissions by a much larger percentage than less economically developed countries like Kenya?
- Some people say that it is impossible for scientists to accurately predict what is likely to happen. Do you think that the scientists and the media are just trying to scare us?



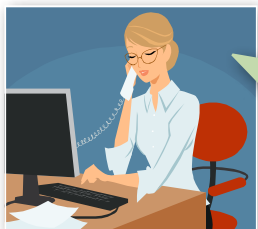
My name is David Miliband and I represent the UK government. The UK Government believes that all countries must reduce their use of coal, oil and gas;

- in order to reduce carbon dioxide emissions,
- to cope with future shortages of oil and increases in energy prices,
- to manage increases in energy demand as countries such as China and India continue their rapid economic growth.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- Do you believe that the UK should reduce their emissions more than other countries because they contributed a high percentage of the emissions in the atmosphere in the past?
- Do you think that countries like China and India should have the same emission cuts as the UK as China is now the leading emitter of greenhouse gases?
- In order to reduce emissions, using nuclear power is a possibility. Do you support the use of nuclear power or are you worried about the long-term disposal of radioactive waste?
- In order to reduce emissions reduction, new technology is needed but this will require extra taxes. Would you be prepared to agree to more taxes in order to protect our climate and our world?
- Is a 60% reduction enough? Surely it needs to be 80%?
- The target year of 2050 is too late. Don't we need to take action sooner?



My name is Dorothy and I am an employee at 'Flylowcost'. We are a budget airline and we can offer travel options which are often less expensive than taking the train or car.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- It has been scientifically proven that flights cause more emissions and are far more damaging to the climate. Surely you must agree that flights should become more expensive to discourage people to fly?
- If people fly then can they make up for it by planting a few trees or giving money to a company which will plant trees in poorer countries?
- Do you believe that everything should be done to prevent climate change from having damaging effects?
- Don't you think that the UK should try and reduce it's emissions and therefore flying should become restricted?



My name is Fiona and I am a campaigner working for an international charity trying to make a difference and do something about climate change.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- Do you believe that people in the developing world have contributed least to climate change but are often suffering the most?
- Do you think that countries like the UK and the USA should make bigger reductions than less economically developed countries?
- You mentioned China which is now the largest emitter of greenhouse gases in the world. Don't you think that China should also reduce emissions by the same amount as the UK?
- Don't you think that a reduction of 80% will harm the UK's economy?
- Should the government pass legislation which will set carbon reductions for industry as well as households?



My name is Sharon Looremeta. I am a Maasai in Kenya and I work with my farming community. We have mainly herding animals and they have been suffering and continue to suffer from drought. Many of the animals we rely on are dying.

In your own words write down the key points so you can ask questions in the debate

You may be asked some of the following questions. Spend some time writing down how you will answer in your role. Can you think of any other questions?

- Do you believe that developed countries are responsible and should take leadership in limiting their own emissions?
- Should developed countries provide funds for helping vulnerable people to adapt to the effects of climate change?

Annex 2

Character worksheets.



Tara Begum, farmer from Bangladesh

My name is Tara Begum. I live in Bangladesh in an area that is always flooded during the monsoon season, making it hard to grow crops.

We have always had to cope with the monsoon but in my lifetime the floods have become a lot worse. We used to get one flood a year but now there are two or three.

I didn't know why this was happening to our community but scientists have told us that it is due to climate change and that climate change is being caused by people in rich countries burning a lot of coal, gas and oil in their industries. It seems unfair that our livelihoods are being ruined by something that is not a result of anything we are doing. They are rich countries and we feel they should spend some of their money in finding ways of reducing the amount of coal, gas and oil they burn so that our problems don't get any worse. They should also be helping us solve the problems that they have caused.

We have been very lucky in that an organization called Practical Action have been working with us to help us adapt to the effects of climate change. They have showed us how to build big rafts from woven water hyacinth roots which we call 'floating gardens' that we can grow our crops on. That way when the floods come the gardens just float on top of the water and the crops are not ruined. This means I can now grow enough crops to feed my family and even have enough left over to sell at market.



Paul, Chief Executive of carbonoffset.com

My name is Paul and I own a carbon offsetting company called 'carbonoffset.com'. We help to pay for the carbon dioxide emissions caused by each of our everyday actions e.g. taking holiday flights, driving our cars, heating or cooling our homes by planting trees or supporting renewable energy projects in developing countries.

I believe that climate change will only be addressed if each and every one of us takes responsible steps to reduce their CO₂ emissions. However we do realise that for some people, avoidance of all CO₂ emissions will be almost impossible – in this case, why not offset your carbon?

We all know that planes contribute large amounts of CO₂ into the atmosphere. We should all try not to fly if possible, but if you have to, then you should be aware of the impact on the planet. This is what you need to do,

- You need to calculate your carbon footprint which will show you how many tonnes of CO₂ you need to offset.
- For the amount of CO₂ which your flight will use, you can choose to invest your money in renewable energy project or in planting trees which will absorb the carbon dioxide generated by your actions.
- For example if you want to offset 1 tonne of CO₂ then for about £8 you can make a pledge which will fund the planting of trees in the Great Rift Valley in Kenya.

By investing your money in projects such as these you are helping in the continued development of countries in Africa and Asia as it supports the community by encouraging sustainable land management and building incomes and the local economy.



Ma Kai, Chinese Businessman

My name is Ma Kai and I am a businessman from China. My country is a rapidly industrialising country and the international community should respect our right to develop. Rich countries are responsible for most of the greenhouse gases produced over the past century, and have an 'unshirkable responsibility' to do more to tackle the problem.

Although China has overtaken the US as the world's largest emitter of greenhouse gases, a quarter of China's carbon emissions are from making goods for export to the already industrialised nations such as the US - that's the equivalent of double the UK's emissions for the same year. In 2004, net exports accounted for 23% of China's total CO₂ emissions.

What I am saying is that it is the demand for products by countries like the UK and the US which is forcing our emissions to be so high. If those countries manufactured these goods themselves, their emissions would be a lot higher. As a businessman, industrialised nations cannot force China to reduce our emissions when the demand for exported goods in your countries is so high.

I admit that China relies on coal to meet two-thirds of its energy needs. This is why in June 2007, China unveiled its first national plan for climate change, saying it is intent on tackling the problem but this will not be at the expense of economic development.

China's aim is to reduce energy use by a fifth before 2010 and increase the amount of renewable energy it produces, but it is the responsibility of industrialised countries to cut their emissions first and to support the development of renewable technology in China.



Dr Rajendra Pachauri, Scientist IPCC

My name is Dr Rajendra Pachauri and I am the Chairman of the Intergovernmental Panel on Climate Change (IPCC) which is the organisation committed to scientific research on climate change. In 2007 we reported that:

- Greenhouse gas emissions caused by humans are beyond reasonable doubt responsible for triggering climate change
- The impacts of climate change are already being felt and fall most heavily on the poor in some of the poorest countries in the world such as lack of water supply in Africa, floods in Asia and damage to ecosystems and crops.
- Limiting climate change by reducing greenhouse gas emissions is technically possible and costs are far smaller than the costs of responding to increasing disasters.
- Temperature rise must be kept as far below 2°C as possible to avoid dangerous climate change and severe impacts. This can be achieved by keeping concentrations of CO₂ in the atmosphere below about 450 parts per million (current atmospheric concentrations are equivalent to about 425 ppm).

The IPCC strongly believes that global greenhouse gas emissions must be cut by more than 50% by 2050. This must be achieved globally by all countries working together for the common good.



UK Government, David Miliband

My name is David Miliband and I represent the UK government.

The UK Government believes that all countries must reduce their use of coal, oil and gas;

- in order to reduce carbon dioxide emissions,
- to cope with future shortages of oil and increases in energy prices,
- to manage increases in energy demand as countries such as China and India continue their rapid economic growth.

An example of how to manage this is to look at countries like Sweden and France who now use a high percentage of nuclear energy and renewable energy instead of fossil fuels. These two countries have the lowest greenhouse gas emissions per person (per capita) in the developed world.

Therefore we need

- To reduce our emissions in the UK by at least 60% by 2050
- To use energy more efficiently
- To use renewable energy sources and nuclear power instead of fossil fuels.
- To invest in new technologies to reduce emissions for example bio-fuel cars
- Economic investment in new technology
- Government policy to provide incentives for new technology even if this means more taxes.



Dorothy, Employee at 'Flylowcost'

My name is Dorothy and I am an employee at 'Flylowcost'. We are a budget airline and we can offer travel options which are often less expensive than taking the train or car.

I feel that airlines are being attacked in the climate change debate. Everyone is saying that aeroplanes cause significant emissions but I think that low-cost airlines are an easy target because it's harder to campaign against power plants that people don't see every day or cars that people use on a daily basis.

While low-cost airlines have their part to play in reducing emissions, plans to force holidaymakers to fly less often (either by introducing green taxes or allocating a 'carbon allowance' for each person) are not the solution. I think that,

- A green tax would only give the government money.
- Improving fuel efficiency and air traffic management would be just as effective
- Airport expansion could reduce emissions, as extra runways would cut the amount of time planes spend waiting to land, and improving air traffic control could cut carbon emissions by 12 per cent.
- By legislating against airlines, this will severely affect the income which developing countries receive from tourism.
- Low cost airlines provide an excellent service which allows many people to enjoy short breaks to favourite destinations for a fraction of what it used to cost. Many people have worked hard to be able to enjoy this privilege previously enjoyed by the wealthy few.

If low cost airlines are to be legislated out of the market this would mean the the end to many holidays abroad for people and also loss of revenue and jobs for many in the industry like me.



Fiona, Climate Change campaigner

My name is Fiona. I have children and I hope to have grandchildren. I'm doing this for them so that I'll be able to answer the question 'what did you do about climate change?'

Climate change is an issue in which science and morality come together. The science tells us that if we continue to release CO2 at our present rate, let alone the increased rates that Chinese industrialisation will produce, we will trigger an increase in temperatures by over two degrees. Morality tells us that it is simply wrong for the rich countries, like ours, to inflict these catastrophic changes on poor countries. It is our actions that have created the problem so it is up to us to fix it.

Many organisations are calling on the UK government to increase the carbon dioxide reduction target, from 60%, to at least 80% by 2050.

As individuals there is so much which we can do to either put pressure on the Government by writing to our MPs to force action, joining organisations and campaigning to force change. We can also take more responsibility for our own actions and lifestyle choices which will help to reduce our carbon emissions.



Sharon Looremeta, Maasai from Kenya

My name is Sharon Looremeta. I am a Maasai in Kenya and I work with my farming community. We have mainly herding animals and they have been suffering and continue to suffer from drought. Many of the animals we rely on are dying.

Parts of Kenya have suffered a drought which started in 2003 and these areas have had no proper rains for three years. During this time pastoralists have lost 10 million livestock animals and two thirds of the population has lost their livelihoods.

The scientists are telling us that pretty soon; this kind of picture of hunger and suffering is the only kind of picture you're going to be able to see here in Africa. We have had no part to play in contributing to this problem but we are already suffering the consequences.

We need more funds to adapt to climate change - more than what we have now. We need deeper emissions cuts so that our children and grandchildren can have a better chance in life. We need new mechanisms to help sustainable development in Africa.

I am a mother. I have a daughter. When she asks me what her life will be like in the future, what am I to say?

Activity 10

ACTIVITY 10	
PARTNER ORGANISATION	Insider Access and Asociación Columbares (adapted from a game initially published by Christian Aid).
NAME	Banana Game.
TOPIC	Sustainable consumption.
TYPE	Game.
DURATION	Max. 30 Mins.
TARGET GROUP	Adults. Groups with learning difficulties, including prisoners, ex-offenders and learners with mental health issues.
MATERIALS	Role scenario cards, print out of banana % image, a banana, 30 pennies.
OBJECTIVES	<p>To introduce the banana chain; what happens to a banana before it reaches the consumer; and to introduce the reality of 'who gets what' in the chain.</p> <p>Key ideas:</p> <ul style="list-style-type: none"> • We are connected to people around the world through the things we consume. • Many products in our shops are made from raw materials imported from the South. • Many plantation workers do not earn enough to meet their basic needs: food, shelter, clothes, medicine and schooling. • Fairtrade labelling has been introduced so that consumers can guarantee that producers get a fair deal for their work.
DESCRIPTION	<p>To start, the educator tells the group that you are about to play a game that traces the path of the banana as it is exported from its plantation in Latin America to their fruit bowl.</p> <p>Then, divide the group up into 5 groups that represent links in the chain. You can do this by asking the groups who they think are the first people to handle a banana in the supply chain.</p> <p>Whoever says worker chooses other workers to join them.</p> <p>Follow the same process to fill the roles of the plantation owner, shipper, importer/wholesaler/ripenener and retailer.</p> <p>Make sure everyone has a role to play (see annex 1).</p> <p>Space the groups out. Give the groups a few minutes to imagine what work their role involves, using the role cards at the end of this activity sheet.</p> <p>Get the groups to imagine that a banana costs 30p. How much of the 30p should they get? Ask them to spend a couple of minutes discussing this, and preparing arguments why. The groups should think about all the jobs/work that they do and resources they use in the banana chain.</p> <p>Ask each group to present their arguments for the amount they have decided and why. The facilitator should ensure that key points for each role are included.</p> <p>Second Round: Inevitably the total from all the groups will be more than 30p. They then need to renegotiate. Put one person from each group in a straight line so that they negotiate with the player next to them as they probably would in real life.</p> <p>Using the print out of banana % image now (annex 2) reveal the true breakdown of who gets what from the final price of a Latin American banana. You can either cut up a banana or give the supermarket 30 pennies -they would keep their share and pass the rest to the importer, who then keeps their share and passes the rest to the shipper and so on.</p> <p>NOTE:</p> <p>If a banana costs 30p, this would mean that:</p> <ul style="list-style-type: none"> • the worker would receive 1p, • the plantation owner (grower) 6p, • the shipper 7p, • importer/ripenener 7p • the retailer 9p. <p>Suggestions for discussion:</p> <ul style="list-style-type: none"> • What does the group think about the division of profits? • Who benefits most/least? Is it a fair situation? • Why is the distribution of income as it is? • Who has power and why? • What could be done to improve the situation? • What role can consumers play? • Would the participant be prepared to pay more for your bananas if you knew workers and farmers got a price that would enable them to meet their basic needs? • Are participants aware of similar situations in Britain - eg gang workers (migrant labour) in East Anglia?
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	<p>To adapt the questions marked by *to your local reality and your local statistics. Feel free to add your own questions.</p> <p>To adapt the length of the game and questions to the educational level of participants.</p>

Annexes:

Annex 1

Banana split role descriptions.

These are only rough ideas and not comprehensive notes!! These can be used by the facilitator to ensure the different roles of the banana chain actors are clear to the participants, and what sort of things these actors need to be worrying

about, what their job entails. We use 5 main actors of the banana supply chain (This is a slightly simplified version of the Real World, but is appropriate for the purpose of this game).

Banana Worker - the Banana Caretakers!

- 1. 12-14 hours/day of hard physical labour in hot conditions
- 2. Selecting the best bananas
- 3. Washing bananas - hands in water all day
- 4. Cutting bananas - carrying heavy loads of bananas on your back

Plantation Owner

- 1. Plantation Running Costs: expensive pesticides, fuel for pesticide spraying aeroplanes, tools and machinery
- 2. Cost of lawyers in case workers sue them for work accidents
- 3. Waste: European Regulations demand a perfect, blemish free fruit which takes a lot of investment, and still a considerable part of your crop does not suit the high demands. So every harvest you lose some money on these lost bananas.

Shipper

- 1. Ships: big cargo ships are very expensive to buy and maintain.
- 2. Fuel: One load between Latin America and Europe may take up to 5 weeks.
- 3. Insurance: in case a cargo is lost or damaged, for which they will be held responsible.
- 4. Refrigeration: On board, the bananas are kept in big fridges to prevent them from ripening during the voyage, which would make them arrive at their destination "spoilt".
- 5. Port Fees. These need to be paid to port

Importer/Ripener

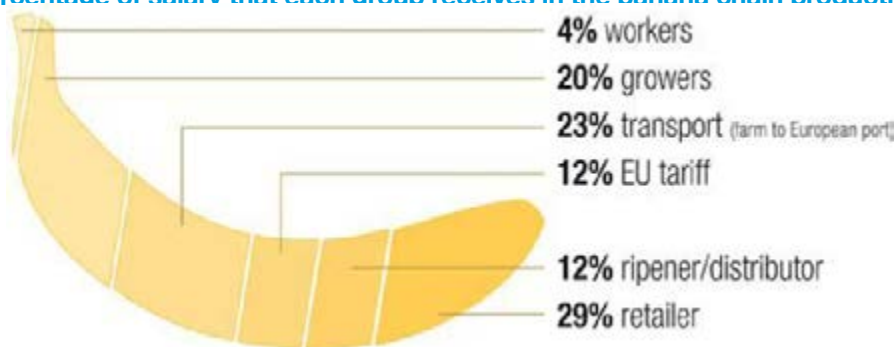
- 1. Transportation: by truck from the European port to big ripening centres, and from there to the retailers.
- 2. Contracts: The importer is liable for contracts both to the producers he buys from (promising to buy x amount per week) and to the retailers (promising to provide them x amount of bananas per week). They must honour these, even if they are let down by one end of the chain.
- 3. Licence Fee. Importers pay licenses for the importation of their bananas into the EU and or UK.
- 4. Big Offices/Admin. Importers "need" big, fancy

Supermarkets

- 1. Staff: Supermarkets require a lot of staff.
- 2. Running Costs: lighting, transport, designing of staff uniforms, carrier bags...
- 3. Developing/buying new property to stay competitive.
- 4. Risk: Supermarkets must not lose their image regarding the quality of their products. If the bananas are handled badly or arrive on the shelves over-ripe, they will lose customers on the long term.
- 5. Image/Advertising: To attract and keep

Annex 2

Percentage of salary that each group receives in the banana chain production.



Activity 11

ACTIVITY 11	
PARTNER ORGANISATION	Insider Access and Asociación Columbares.
NAME	Chewburgh City debate.
TOPIC	Sustainable mobility.
TYPE	Discussion - debate.
DURATION	Max. 20 Mins.
TARGET GROUP	Adults. Groups with learning difficulties, including prisoners, ex-offenders and learners with mental health issues.
MATERIALS	Chewburgh City role play profiles and questions to consider.
OBJECTIVES	The aim of this activity is to consider the various interest groups within a town and the impact of pedestrianisation on the local environment, health of residents and economic impact on local businesses.

DESCRIPTION

The activity consists on a role-play based on the following course:

In the last decade, in Chewburgh, city of 400,000 inhabitants, traffic has increased by 10%, causing numerous traffic jams and an increased in allergies and respiratory diseases.

Chewburgh City Council has proposed to close the city centre to the traffic, so only residents, carriers for loading and unloading buses can access, as long as taxis with restricted timetable. Speed in this area would be restricted to 30 miles / hour.

The law is pending, but has sparked much debate among citizens, groups in favor and others against. In this regard, the council has opened a public participation process to listen to all those involved and make a final decision.

To conduct the activity the following steps will be done:

1. Divide participants into 5 groups and give each group a role play profile and discussion notes (annex 1).
2. Allow the groups 10 mins to discuss their position and to consider the questions raised on their profile notes.
3. Facilitate a discussion on of the groups with each group presenting its position.
4. Facilitate a vote on the proposition to Pedestrianise the city centre.

COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	The debate can be amended to a real local town centre situation.
---	--

Annexes:

Annex 1

Role play profile and discussion notes.

THE PROBLEM:

In the last decade, in the city of Chewburgh, city of 400,000 inhabitants, traffic has increased by 10%, causing numerous traffic jams and an increased in allergies and respiratory diseases.

Chewburgh City Council has proposed to close the city centre to the traffic, so only residents, carriers for loading and unloading buses can access, as long as taxis with restricted timetable. Speed in this area would be restricted to 30 miles / hour. The law is pending, but has sparked much debate among citizens, groups in favor and others against. In this regard, the council has opened a public participation process to listen to all those involved and make a final decision.

	About us	Arguments for the debate	Think about these issues for your target group
Sustrans	<p>We're a leading UK charity enabling people to travel by foot, bike or public transport for more of the journeys we make every day.</p> <p>We work with families, communities, policy-makers and partner organisations that people are able to choose healthier, cleaner and cheaper journeys, with better places and spaces to move through and live in.</p>	<p>UK roads are already the most heavily used in Europe, yet this will bring an increase in traffic volume and in turn, more delays.</p> <p>CO₂ emissions from cars make up 13% of the UK total.</p> <p>Air pollution is a big killer, causing 29.000 premature deaths each year in the UK and 4.300 in London.</p> <p>Every year in UK around 19,000 cyclists are killed or injured in reported road accidents, including around 3,000 who are killed or seriously injured.</p> <p>Around 75% of fatal or serious cyclist accidents occur in urban areas.</p>	<ol style="list-style-type: none"> 1. Is it good for the health? 2. Is it good for the environment? 3. Is it good for the economy? (Take into account the public health system, local trade, families). 4. What are the alternatives?

THE PROBLEM:

In the last decade, in the city of Chewburgh, city of 400,000 inhabitants, traffic has increased by 10%, causing numerous traffic jams and an increased in allergies and respiratory diseases.

Chewburgh City Council has proposed to close the city centre to the traffic, so only residents, carriers for loading and unloading buses can access, as long as taxis with restricted timetable. Speed in this area would be restricted to 30 miles / hour. The law is pending, but has sparked much debate among citizens, groups in favor and others against. In this regard, the council has opened a public participation process to listen to all those involved and make a final decision.

	About us	Arguments for the debate	Think about these issues for your target group
British Lung Foundation	<p>We are a charity leading the fight against lung disease.</p> <p>We fund vital research into understanding, treating and preventing lung disease.</p> <p>We aim to prevent lung disease by campaigning for positive change in the UK's lung health.</p> <p>We offer hope and support at every step so that no one has to face lung disease alone.</p>	<p>UK roads are already the most heavily used in Europe, yet this will bring an increase in traffic volume and in turn, more delays.</p> <p>CO₂ emissions from cars make up 13% of the UK total.</p> <p>Air pollution is a big killer, causing 29.000 premature deaths each year in the UK and 4.300 in London.</p> <p>Lung disease affects more than 12 million people across the UK.</p>	<ol style="list-style-type: none"> 1. Is it good for the health? 2. Is it good for the environment? 3. Is it good for the economy? (Take into account the public health system, local trade, families). 4. What are the alternatives?

THE PROBLEM:

In the last decade, in the city of Chewburgh, city of 400,000 inhabitants, traffic has increased by 10%, causing numerous traffic jams and an increased in allergies and respiratory diseases.

Chewburgh City Council has proposed to close the city centre to the traffic, so only residents, carriers for loading and unloading buses can access, as long as taxis with restricted timetable. Speed in this area would be restricted to 30 miles / hour. The law is pending, but has sparked much debate among citizens, groups in favor and others against. In this regard, the council has opened a public participation process to listen to all those involved and make a final decision.

	About us	Arguments for the debate	Think about these issues for your target group
Local trade	<p>We are a group of local trades.</p> <p>We think if people can't use the car to arrive to our shops they will go to the shopping centre outside the city.</p>	<p>Across the UK the small retailer is being wiped out. In the whole of Britain there are fewer than 1,000 specialist fishmongers, 7,000 butchers and 4,000 greengrocers, and barely 3,000 independent bakeries. In all these categories, the number of specialists has fallen by 90% since the 1950s, and at least 40% in the last decade alone. They have been driven out by supermarkets, which now sell 97% of our food, with four chains accounting for 76%.</p>	<ol style="list-style-type: none"> 1. Is it good for the health? 2. Is it good for the environment? 3. Is it good for the economy? (Take into account the public health system, local trade, families). 4. What are the alternatives?

THE PROBLEM:

In the last decade, in the city of Chewburgh, city of 400,000 inhabitants, traffic has increased by 10%, causing numerous traffic jams and an increased in allergies and respiratory diseases.

Chewburgh City Council has proposed to close the city centre to the traffic, so only residents, carriers for loading and unloading buses can access, as long as taxis with restricted timetable. Speed in this area would be restricted to 30 miles / hour. The law is pending, but has sparked much debate among citizens, groups in favor and others against. In this regard, the council has opened a public participation process to listen to all those involved and make a final decision.

	About us	Arguments for the debate	Think about these issues for your target group
Neighbours	<p>We are the neighbours.</p> <p>We have had during the last years lots of problems with traffic jam, noise, illegally parked cars.</p> <p>Our children can't go alone to the street because it's dangerous and at night we can't sleep well because of the traffic.</p>	<p>UK roads are already the most heavily used in Europe, yet this will bring an increase in traffic volume and in turn, more delays.</p> <p>CO₂ emissions from cars make up 13% of the UK total.</p> <p>Air pollution is a big killer, causing 29.000 premature deaths each year in the UK and 4.300 in London.</p> <p>In places where daytime road traffic noise exceeded 60 decibels there were 4% more deaths than in quieter areas where the noise was 55 decibels or below.</p>	<ol style="list-style-type: none"> 1. Is it good for the health? 2. Is it good for the environment? 3. Is it good for the economy? (Take into account the public health system, local trade, families). 4. What are the alternatives?

THE PROBLEM:

In the last decade, in the city of Chewburgh, city of 400,000 inhabitants, traffic has increased by 10%, causing numerous traffic jams and an increased in allergies and respiratory diseases.

Chewburgh City Council has proposed to close the city centre to the traffic, so only residents, carriers for loading and unloading buses can access, as long as taxis with restricted timetable. Speed in this area would be restricted to 30 miles / hour. The law is pending, but has sparked much debate among citizens, groups in favor and others against. In this regard, the council has opened a public participation process to listen to all those involved and make a final decision.

	About us	Arguments for the debate	Think about these issues for your target group
Suburban citizens	<p>We are the suburban citizens.</p> <p>We have to go everyday to work to the city centre, so we need to use the car.</p> <p>The public transport is expensive and we think don't have any other alternative</p>	<p>Fares increased by an average of 6.5% in the year to last June, more than double the rate of inflation (2013 data).</p> <p>A British worker on an average salary of £27,200 a year would be spending 17% of their wages on a £391 monthly season ticket from Brighton to London once the fare rises come into effect, according to the analysis. Workers making similar journeys spend 12% of their salary on train fares in France, 9% in Germany, and 6% in Spain and Italy (2015 data).</p> <p>The impact of increasing fare increases on the public has been devastating. What tends to be forgotten is that high fares can also force people to move house or change employment. This in turn can restrict social and family time.</p>	<ol style="list-style-type: none"> 1. Is it good for the health? 2. Is it good for the environment? 3. Is it good for the economy? (Take into account the public health system, local trade, families). 4. What are the alternatives?

Activity 12

ACTIVITY 12	
PARTNER ORGANISATION	Insider Access.
NAME	Slow Tourism.
TOPIC	Sustainable consumption.
TYPE	Group Activity.
DURATION	Max. 45 mins.
TARGET GROUP	Adults. Groups with learning difficulties, including prisoners, ex-offenders and learners with mental health issues.
MATERIALS	Slow tourism trainer notes; slow tourism activity sheet.
OBJECTIVES	To introduce participants to the concept of slow tourism, where an individual or family live in an area as opposed to consuming the area. To get the participants to think about their own home area and consider it from a slow tourism perspective.
DESCRIPTION	Using the trainer notes, the educator should discuss with the group the concept of slow tourism. Then, the educator divide the participants into groups of 3 or 4 and, using the attached activity sheet, get the groups to consider their own home environment in terms of the elements of slow tourism. Finally, they discuss the group ideas.
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	Feel free to add your own questions. To adapt the length of the game and questions to the educational level of participants.

Annexes:

Annex 1

Trainer background notes.

Why consider Slow Tourism?

Slow Tourist is both a philosophy and a strategy. Its about giving visitors a different experience, one which has a deeper personal impact, environmentally is sustainable and through an increased spend supports tourism and employment development in an area. It's about travelling slow, living the places and not consume them.

Slow is not a synonym of lazy, and that is why we offer many different options for active holidays, the best way to appreciate local food and culture and nature; various possibilities for your holidays in the mountains or seaside, away from the stress and the noise of the city, to regenerate the body and the spirit, whether you are a sporty person or simply somebody who knows how to enjoy a beautiful landscape. Its about sightseeing a few places, entering in deep contact with them, living them, tasting them, assimilating them and at the same time protecting them as invaluable human and social heritage belonging to all mankind. SLOW TOURISM fosters the social, i.e. responsible tourism, which respects both natural and cultural diversities, requiring spirits of adaptability to new and unusual habits. It encourages residents and visitors to share the most peculiar features of the territory with positive and reciprocal curiosity. Slow tourism is about new approaching to hospitality and the reception on tourists, in order to improve the attraction of an area, facilitating the desire of visitors to want to linger and explore/experience to another level. It supports social environmental growth and sustainability.

What exactly is Slow Tourism?

Slow tourism is a strategy which embraces low carbon consumption, it has a greater emphasis on the travel experience.

Slow tourism is about:

- Quality time.
- A quality experience.
- Physically slowing down to enjoy what is on offer in a local area.
- Meaning and engagement.
- Being in tone with ecology and diversity.

Slow tourism:

- Challenges the current normal focus of tourism in term of speed, access and travel cost.
- It is a critical appreciation of the journey embracing the need not to impact heavily on the environment.
- Slow Tourism is both a philosophy and a strategy.
- Its about giving visitors a different experience, one which has a deeper personal impact, environmentally is sustainable and through an increased spend supports tourism and employment development in an area.
- It's about travelling slow, living the places and not consume them.
- Its about sightseeing fewer places, entering in deep contact with them, living them, tasting them, assimilating them and at the same time protecting them as invaluable human and social heritage belonging to all mankind.
- It fosters the social, i.e. responsible tourism, which respects both natural and cultural diversities, requiring spirits of adaptability to new and unusual habits.
- It encourages residents and visitors to share the features of an area territory with positive and reciprocal curiosity.
- Its about new approaches to hospitality and the reception on tourists, in order to improve the attraction of an area, facilitating the desire of visitors to want to linger and explore/experience, to another level.
- It supports social and environmental growth and sustainability.

Slow tourism offers:

- A possibility for the tourism sector to develop in a time of economic constraint.
- A transition from high to low carbon consumption.
- To support behavioural change with in the sector increasing awareness of the global impact of a high carbon consumption of destinations.
- To support behavioural change of tourists in terms of:
 - Individual perspectives.
 - Interpersonal interactions.
 - Community interactions.
- To foster mass tourism environmental concern and behaviour.

Activity 13

ACTIVITY 13	
PARTNER ORGANISATION	Global Playground Stockholm.
NAME	Sustainable kits.
TOPIC	Energy / Water saving, waste management and urban gardening.
TYPE	Workshop.
DURATION	60 minutes
TARGET GROUP	Youth 25-31.
MATERIALS	Saving kits, consisting on sealing straps, recycle bins/boxes, gardening boxes, LED lamps, water reducing shower, plants, etc.
OBJECTIVES	To show how the energy and water can be saved by using different tools as well as decreasing waste and starting an urban garden.
DESCRIPTION	<p>Before the activity, the educators have to make environmental audits in participants' houses, in which educators and participants agreed about the participants needs and decided the elements for the saving kits.</p> <p>To arrange the workshop the experts on the specific topic should be contacted regarding the presentation. This expert could be a PhD student from a university doing research on this area. At the same time it could also be a consultant/other person working in this specific area. To organize a presentation, the content of the presentation should be approved by project coordinator concerning the participants' knowledge, experience and needs. The content should be within the project objectives.</p> <p>At the end of the workshop some time should be dedicated to discussion regarding questions from participants and their feedback.</p> <p>At the end of the workshop, energy and water saving kits are given to each participant explaining how to use each kit and how energy can be saved.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Activity 14

ACTIVITY 14	
PARTNER ORGANISATION	Global Playground Stockholm.
NAME	Waste management.
TOPIC	Waste.
TYPE	Lecture.
DURATION	60 minutes
TARGET GROUP	Youth 25-31.
MATERIALS	Power point.
OBJECTIVES	To understand how city can implement industrial model where waste can be used as a new resource for ex producing energy, or biogas, and fertilizers.
DESCRIPTION	To arrange a study visit to the information centre working with waste and recycling management, the information officer/coordinator should be contacted and introduced to the project. Before the visit, the project coordinator and speaker should agree on the content and focused areas of the presentation based on knowledge and experience of the participants but also on the specific objectives of the project.
	When agreed on the content, available time for the presentation/study visit should be booked. This can be done by using doodle link where each participant can choose a date that suits him/her best.
	Concerning the practical manner of the workshop, it's important to bring the participants to the actual place where the information centre/company/organisation is operating in order to see where and how the work is done.
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	It's important that at the end of the presentation/study visit some time is dedicated to questions and answers of the participants as well as feedback.

Activity 15

ACTIVITY 15	
PARTNER ORGANISATION	Global Playground Stockholm.
NAME	Sustainable consumption.
TOPIC	Consumption and fashion.
TYPE	Lecture.
DURATION	60 minutes
TARGET GROUP	Youth 25-31.
MATERIALS	
OBJECTIVES	To discuss how to minimize the consumption in our everyday life.
DESCRIPTION	<p>To arrange a study visit to the local designer working with sustainable fashion, the company should be contacted and briefed about the project. Before the visit, the project coordinator and speaker should agree on the content and focus areas of the presentation based on knowledge and experience of the participants but also on the specific objectives of the project.</p> <p>When agreed on the content, available time for the presentation/study visit should be booked. This can be done by using doodle link where each participant can choose a date that suits him/her best.</p> <p>Concerning the practical manner of the workshop, it's important to bring the participants to the actual place where the company is working in order to see where clothes are designed and produced.</p> <p>It's important that at the end of the presentation/study visit some time is dedicated to questions and answers of the participants as well as feedback.</p> <p>The participants have the opportunity to discuss with the co-founder about alternative clothes and materia consumption and how it affects the environment. It is particularly interesting for the participants to compare the patterns in the consumption of clothes in different countries, and to reflect upon questions such as "How much did sustainability penetrate the fashion world?" and "Who will start the change? The fashion world or the consumer?"</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Activity 16

ACTIVITY 16	
PARTNER ORGANISATION	Global Playground Stockholm.
NAME	The Future Food.
TOPIC	Sustainable consumption.
TYPE	Lecture and seminar.
DURATION	120 minutes
TARGET GROUP	Youth 25-31.
MATERIALS	Power point
OBJECTIVES	To promote different food alternatives with limited impact on the environment and improving the health of human being.
DESCRIPTION	<p>In every city there are many local initiatives for the citizens to participate. When a relevant and interesting initiative is arranged, the organizers of the event (initiative) can be contacted and informed about the project. This will create synergies between the organizers of the event and the project. The participants are then invited to participate at the event.</p> <p>The activity shows the environmental impact from different food alternatives and potential for solving the world hunger as well as the meat industry impact on the planet and climate.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Activity 17

ACTIVITY 17	
PARTNER ORGANISATION	Bassin Guir Association for Development and Protection of the Environment.
NAME	My environment, my responsibility.
TOPIC	Preservation of the environment.
TYPE	Campaign.
DURATION	4 hours.
TARGET GROUP	Students.
MATERIALS	Banners, shovel, mortar cart.
OBJECTIVES	<p>To make the students, as well as adults, be aware of the main principles of <i>Green in Everyday Life</i> project.</p> <p>To encourage the population to get involved in the activities of the project.</p> <p>To make people aware of their responsibility toward daily acts that make environment in risks.</p>
DESCRIPTION	<p>Organisation of a symposium on the environmental risks and give propositions to minimize the risks by change of daily habits.</p> <p>One practical idea is to establish a consensus on a tax-system by the citizens, for example in case the management of trash is not respected in the area...</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Activity 18

ACTIVITY 18	
PARTNER ORGANISATION	Bassin Guir Association for Development and Protection of the Environment.
NAME	Cleaning up the lake.
TOPIC	Preservation of the environment.
TYPE	Campaign.
DURATION	4 hours.
TARGET GROUP	Students.
MATERIALS	DATA-SHOW, Computer, small sheets of paper and pens, banners.
OBJECTIVES	To make the students aware of the main principles of the <i>Green in Everyday Life</i> project by making them involved into the activities of the project in an active and participatory way.
DESCRIPTION	<p>To divide the students into groups, each one with an educator. Then, ask them to make propositions for the <i>Green Homes Programme</i>, as well as prepare the banner and the signs.</p> <p>The participants meet in a lake, under the slogan ‘my environment, my responsibility’ and start cleaning an implement separated trashes.</p> <p>Finally, they distribute some leaflets in the neighborhoods in order to show the serious problem of waste and also the importance of protecting the environment.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Activity 19

ACTIVITY 19	
PARTNER ORGANISATION	Bassin Guir Association for Development and Protection of the Environment.
NAME	Meeting in the Youth’s council.
TOPIC	Preservation of the environment.
TYPE	Meeting/workshop.
DURATION	4 hours.
TARGET GROUP	Youth’s council.
MATERIALS	Banners, shovel, mortar cart.
OBJECTIVES	<p>To write recommendations for the COP22 (that took place when the activity was proposed). It’s possible to make the activity coincides with other event, in this case the recommendations will be done for it.</p> <p>To exchange experiences of actions taken in everyone’s city.</p> <p>To establish a common platform to coordinate the activities in the project, as youth’s council.</p> <p>To involve the dynamic of the <i>Green in Everyday Life</i> project into the plans and strategies of society actors into communes.</p>
DESCRIPTION	<p>The activity consists on a workshop with the youth council.</p> <p>The activity starts by a plenary in which the historical process of the COPs’ is discussed before the COP22, as well as the technical tools to make real actions and policies into their cities/communes are discussed too.</p> <p>Finally, the students make recommendations to the COP22 and establish a platform for coordinating and monitoring the process.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	



ACTIVITY 20	
PARTNER ORGANISATION	Bassin Guir Association for Development and Protection of the Environment.
NAME	Save the environment.
TOPIC	Energy and water.
TYPE	Workshop.
DURATION	4 hours.
TARGET GROUP	Students.
MATERIALS	DATA-SHOW, Computer, small sheets of paper and pens.
OBJECTIVES	<p>To promote changes on simple daily behaviours at homes and schools to save water and energy and help the environment.</p> <p>To encourage students to get involved in the activities of the project.</p> <p>To make aware the community about the waste problem and mobilise them on protecting the environment.</p>
DESCRIPTION	<p>The educator introduces the project context and its international dimension. He/she explains the importance of the environment via games in which the students exchange roles from human being to water, tree, soil, air...</p> <p>After playing the games, students write what they think about their daily habits (consumptions of water, waste...), they discuss it into groups.</p>
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Activity 21

ACTIVITY 21	
PARTNER ORGANISATION	East & WE Center for Human Resources Development.
NAME	Best Lights.
TOPIC	Energy.
TYPE	Exercise.
DURATION	30 min.
TARGET GROUP	Children (12+), youngsters and adults. People with learning difficulties.

MATERIALS	4 types of bulbs (Incandescent, Halogen , High Intensity Discharge (HID), Light Emitting Diode (LED)).
OBJECTIVES	To educate participants to calculate the consumption of several types of bulbs to find the best one. To show participants the saving of each type of bulbs in terms of energy consumption and total cost. To teach participants how to calculate the environmental footprint of each type of bulbs.

This exercise will help the participants to select the best type of lighting and do the calculations of the total cost in the bulb lifetime.

The implementation steps are the following:

- Spread the participants into groups (5 per group).
- Give each group a type of bulb.
- Each group starts setting the characteristics of each type of bulb.
- Finally, each group will classify their bulb according to the table in the annex 1.
- The educator promotes a reflexion about the energy consumption of each bulb, talking about the environmental and economic aspects, as well as introducing the concept of environmental footprint of energy consumption.

DESCRIPTION	
COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	

Annexes:

Annex 1

Comparison table for different types of bulbs.

All bulbs provide about 25,000 hours of light.				
	INCANDESCENT BULB	HALOGEN	COMPACT FLUORESCENT (CFL)	LIGHT EMITTING DIODE (LED)
COST OF BULB				
Life of bulb (how long it will light)	1,000 hours	3,000 hours	10,000 hours	25,000 hours
Number of bulbs to get 25,000 hours	25 bulbs	8.3 bulbs	2.5 bulbs	1 bulb
Price per bulb	\$0.50	\$1.00	\$3.00	\$15.00
Cost of bulbs for 25,000 hours of light	\$12.50	\$8.30	\$7.50	\$15.00
COST OF ELECTRICITY				
Total hours	25,000 hours	25,000 hours	25,000 hours	25,000 hours
Wattage	60 watts = 0.060 kW	40 watts = 0.040 kW	13 watts = 0.013 kW	12 watts = 0.012 kW
Total kWh consumption	1,500 kWh	1,075 kWh	325 kWh	300 kWh
Price of electricity per kWh	\$0.12	\$0.12	\$0.12	\$0.12
Cost of Electricity	\$180.00	\$129.00	\$39.00	\$36.00
LIFE CYCLE COST				
Cost of bulbs	\$12.50	\$8.30	\$7.50	\$15.00
Cost of electricity	\$180.00	\$129.00	\$39.00	\$36.00
Life cycle cost	\$192.50	\$137.30	\$46.50	\$51.00
ENVIRONMENTAL IMPACT				
Total kWh consumption	1,500 kWh	1,075 kWh	325 kWh	300 kWh
Pounds (lbs) of carbon dioxide per kWh	1.21 lbs/kWh	1.21 lbs/kWh	1.21 lbs/kWh	1.21 lbs/kWh
Pounds of carbon dioxide produced	1,815 lbs carbon dioxide	1,301 lbs carbon dioxide	394 lbs carbon dioxide	363 lbs carbon dioxide

Activity 22

ACTIVITY 22	
PARTNER ORGANISATION	East & WE Center for Human Resources Development.
NAME	Water Participatory approach.
TOPIC	Water.
TYPE	Exercise.
DURATION	30 min.
TARGET GROUP	Children (12+), youngsters and adults. People with learning difficulties.
MATERIALS	Bottle of water, transparent water cups (glass or plastic).
OBJECTIVES	To educate participants on our water consumption. To reflect on behaviours that promotes water savings or, on the contrary, increase it. To highlight the role of each one in saving water.

DESCRIPTION

This exercise awares the participants about their role in fair consumption of water, by reflecting what happens in the real life.

In Jordan, a fixed amount of water flows through the pipe during a certain period of time in a village or neighborhood. So, if the people in the upstream consume all the water, the people in the downstream will receive nothing. This fact usually causes conflicts between the people living in both sides of the village or neighborhood. In this sense, if both people save water the conflict will be reduced.

The implementation steps are the following:

- The educator invites participants to sit in a circle and give each participant an empty cup.
 - The educator takes a round and fill up the cups from the bottle with different quantities (Full, Half, Quarter or empty).
 - The educator set in front of the participants in silence waiting anyone to take an action.
- Some different behaviours will be observed: Some people drink the water, some others give some of their own water to other participants who have empty cups, etc.
- The educator asks the participants if they are agree on thier shares? If not, they can take an action.
 - Normally the participants start re-spreading the water, shares to be in a fair manner.
 - The educator gives a brief about the reflection of this exercise in the real life.

COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	
---	--

Activity 23

ACTIVITY 23	
PARTNER ORGANISATION	East & WE Center for Human Resources Development.
NAME	Waste Separating.
TOPIC	Waste.
TYPE	Campaign.
DURATION	3 hours.
TARGET GROUP	Children (12+), youngsters and adults. People with learning difficulties.
MATERIALS	Bottle of water, transparent water cups (glass or plastic).
OBJECTIVES	To clean up the national parks. To aware the participants about the different types of waste and the importance of recycling.

DESCRIPTION

The activity consists on organising an event on social media targeting the people who lives in the surrounding of a national park and inviting them to help us in cleaning the park from the accumulated waste.

The organisers start to spread coloured bags for the participants to collect the waste considering the separation between plastic, paper and glass.

After the waste cleaning, an awareness session inside the park about the carbon and the water footprint of the waste is organised.

The implementation steps are the following:

- To insure the invitation to reach lots of people and got confirmation of attendance from them.
- To spread the coloured bags (one for each participant).
- To ask them to go on groups (each group should be holding the same colour of bags).
- To give a small brief about the types of waste and its environmental impacts.
- To start Cleaning up.
- To collect the separated waste and ask the invited recycling company to talk about the economic value of this waste and other specialist to talk about the environmental impact of it.

COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS

Activity 24

ACTIVITY 24	
PARTNER ORGANISATION	East & WE Center for Human Resources Development.
NAME	Environmental Resources Sustainability.
TOPIC	Sustainable consumption.
TYPE	Game.
DURATION	1 hour.
TARGET GROUP	Youth (18 - 30 years).
MATERIALS	8 Plates, 700 g. of M&Ms sweets.
OBJECTIVES	To understand the meaning of Resources Sustainability. To understand the importance of the PPP (Public Private Participatory). To point out the importance of sustainable consumption.

DESCRIPTION

This is an interactive activity that shows how the natural resources could be depleted if we over consume them in an irresponsible manner, as well as let the participants to think and coordinate together to agree in sustaining the resource to save it from depletion.

This activity needs to be implemented in two phases:

Phase one: irresponsible consumption. Each participant will consume the natural resource following his own greed without asking the others; here the natural resource will be depleted.

Phase two: Sustainable consumption. The entire participant agrees to consume from the natural resource in a fair manner with keeping a share for the environment to recover what was consumed.

The implementation steps are the following:

- To spread the participants into groups (5 per group).
- To put two plates in front of each group (1 empty, 1 full of M&Ms).
- To give the rules for phase 1 (Talking together is not allowed, put 15 pieces of M&Ms in the empty plate from the full one, ask each one to eat what he/she want from the plate with 15 pieces, inform them that the Plate doesn't fit more than 15 pieces, multiply the rest of M&M's that was left in the plate).
- To repeat Step 3 for another 3 times.

Here we will discover that most of the plates are empty or only few pieces of M&Ms left.

- To give the rules for phase 2 (Talking together is allowed, put 15 pieces of M&Ms in the empty plate from the full one, ask each group to agree on a fair share for each one to eat from the plate with 15 pieces with keeping the share of the plate to stay full for the coming periods, multiply the rest of M&M's that was left in the plate).

Here we will discover that most of the groups agreed to consume 50% of the 15 pieces to keep it full for the coming periods and fairly shared the other 50% between them).

Give a brief about what happens in both phases with giving an imagination that the plate is the natural resource and the participants are the beneficiaries of this resource and each period is the natural recovery period for each resource. In Phase One each one wants to feed his/her greed without talking to the others so the resource depleted, but in Phase Two the resource will never become empty because it is consumed in a sustainable manner.

COMMENTS / ADAPTATIONS FOR WORK WITH GROUPS WITH SPECIAL NEEDS	
---	--

5. Evaluation of the *Green Homes Programme*

Evaluation is a **useful tool for those organisations that worked with the project, for those technicians that developed it and, last but not least, for the participants themselves**, who have the right to know to what extent the objectives of the programme have been achieved.

The evaluation used in the *Green Homes Programme* drives in the participating households a **culture of measuring**. By acquiring this methodology, the participants will be able to recognise and evaluate their progress and setback in sustainability even after the end of the programme.

This evaluation **tries to detect changes in attitudes, but also the evolution of more tangible sustainability aspects such as water and energy consumption** through reliable data (invoices and meters).

The Programme has two evaluations:

- An **initial evaluation of water, energy and domestic consumption**, where the starting situation of households and their consumption habits is evaluated. To evaluate these data the participants are asked to include bills for electricity, gas or any other type of energy they use, as well as water consumption data. Also, other qualitative data are analysed.
- A **final questionnaire** to identify the changes and reduction in consumption.

These evaluations are done by asking the participants to fill in an initial questionnaire and a final questionnaire (annexe 1).

We must ensure the participants that all their data will be treated confidentially and the results will be presented globally, without speaking at any time about concrete individual cases.

It is essential that every questionnaire is identified

by a code, which corresponds to one participating household. If participants find difficult to access to their consumption data, you can propose them to complete a letter authorizing a technician of the Programme to obtain their data directly from the energy or water company. In some cases, the coordinating organisation will have to sign an agreement with the companies to facilitate this task; in others, the companies provide the data with simply a written authorization from the contract holder. This is a good way how to obtain more reliable consumption data.

In some countries, as Nordic countries, normally all multifamily are heated with district heating which is included in the rent, so it's quite difficult to get the bills to analyse the energy saving. In this case you can sign an agreement with the landlord or real-estate agency, focused on social aspects such as behaviour changes.

When working with schools it is of first importance to analyse the learning needs of each group of students before the start, to then be able to select relevant items in the preparation of the initial and final questionnaires, and hence making the programme evaluation possible.

If the programme is carried out with associations, there are several evaluation options:

- **Analyse the results of savings of the entity itself**, if there are centres in which participants are living together (shelters, prisons, supervised apartments...).
- **Analyse the results of all the people involved in the programme** through the organisation.
- **Analyse the results of a representative sample of participants in the Programme**. The latter case applies when the profile of the participants makes it difficult to obtain data from all of them, for example with some families who, because of their vulnerable situation, tend to

change housing frequently, are renting and have difficulties accessing the consumption data, etc.

When analysing the evolution of consumption, only cases with both initial and final data can be used. In this way, we avoid biases due to differences in consumption between one household and another, which can be very significant. Those households which underwent important changes affecting their consumption during the evaluation period (increase or decrease in the number of residents, change of

energy supply, reforms, etc.) will be considered statistically invalid.

The way the data are processed depends on their quantity. You can use spread sheets or more complex statistical programmes such as SPSS, which offer more options.

Participants have to fill in a satisfaction survey as well, to assess the programme and propose new challenges.

GREEN HOMES PROGRAMME IN SIX COUNTRIES

Experiences and reflections of *Green in Everyday Life* project partners

Asociación Columbares, Spain

The target group addressed in Spain were **families at risk of social exclusion, most of them immigrants from the Magreb region**. These families participated in two different projects developed by Asociación Columbares, so **Green in Everyday Life** project activities were included as part of their qualification. The groups that Columbares worked with were:

- 2 groups of women in Las Torres de Cotillas (Murcia), that take part in the project *Social community intervention in El Carmen neighborhood*. The aim of this project is to facilitate intercultural coexistence and social cohesion in the neighbourhood, which is mainly

inhabited by vulnerable people.

- 3 groups of women and 2 of men in La Aljorra (Murcia), that take part in the project *Civic coexistence and social participation in La Aljorra*. This programme aims to promote the interculturality in a neighbourhood with 31 % of immigrants, encouraging the inclusion of the immigrant population in the activities and resources of the district, programming new ones in which participate actively all groups, and promoting networking.

59 persons participated in the project, representing **254 family members**.

Environmental audits in households

7 environmental audits were conducted by Asociación Columbares. 59 persons participated in the environmental audits, representing 254 families. The environmental audits consisted on making a group review of all rooms, electronics and appliances of a typical household, analysing the heating and cooling system, the isolation and passive barriers of the house (blinds, awnings...), the water heaters, the waste, the consumption. This revision was done in the classroom where the beneficiaries normally do the different activities of the social project they participate to, analyzing both technological

and behaviour aspects. The methodology was interactive, asking the participants how they use the appliances, what are their behaviours to reduce energy, water, waste, etc. and giving at the same time advice to save and make a better use of water and energy. The environmental audits were conducted by two people, the **Green in Everyday Life** project technician and a social technician. The first one was in charge of the environmental part, while the second one acted as a mediator and facilitator, as well as he/she translated into Arabic when was necessary.

82



Environmental audits for families at risk of social exclusion. Carmen Molina, Asociación Columbares.

Meeting or workshops

Asociación Columbares has conducted **15 awareness rising workshops** with **165 participants**. The workshops were about 1) climate change and energy saving, 2) water saving, 3) sustainable consumption and waste reduction. Included in the third topic, two workshops on soap making were done, in order to reduce the domestic oil waste and promote the use of eco-cleaning products. The methodology used in the workshops was based on games, role-plays and other interactive activities, all of them adapted to the learning difficulties of the target groups.



Workshop on soap making. Carmen Molina, Asociación Columbares.

Educational materials



Saving kit distributed between the beneficiaries. Carmen Molina, Asociación Columbares.

72 Saving Kits were distributed between the beneficiaries. The saving Kits included: 4 aerators, 1 flow restrictor for the shower, 1 recycle bags kit, 1 power strip with switch, 2 saving bulbs, 1 thermometer, 1 reusing bag for the shopping, 1 packet of insulating adhesive stripes, a notebook and a personal card project. The use and purpose of all the materials included in the Saving Kits was clarified to the participants when handed out.

Evaluation

To evaluate the effects that the project made in the participants, Asociación Columbares has collected **7 Initial Questionnaires** and **7 Final Questionnaires**, which have been used to make an estimation of the savings reached by the full group. As many electricity and water bills as possible were collected from those families who have completed the initial and final questionnaires. However, due to the characteristics of the target group, it has been very difficult in most cases to obtain significant results (the vulnerable families tend to change housing frequently, are renting and have difficulties accessing the consumption data, they move to Morocco in summer, they stop most of their daily activity during Ramadan, etc.).

The achievements of the project are both qualitative and quantitative.

Qualitative achievements refer to behaviour

changes in families:

100 % families:

- Have installed energy saving light bulbs.
- Have reduced the temperature of the washing programmes when doing laundry.
- Switch off the stand-by devices.
- Have installed aerators on taps and showers.
- Collect cold water while waiting for the hot water when taking a shower.
- Are educating their children in the topics of the project (saving water and energy, reducing waste and improving sustainable mobility), as they are transferring their knowledge to their friends and neighbours.
- Have introduced new criteria when shopping: all of them consider these questions before buying: “Is it harmful to the environment and/or our health?” and “Which is the country of origin of the products“. Other new thoughts introduced were “Do I really need it?“, “Is it over-packaged?”

and “I feel good decreasing the consumption in general“. Besides these criteria, the reusable bags were introduced when shopping.

50% families:

- Have decreased their refrigerator temperature.
- Have reduced the use of the washer machine.
- Have increased the temperature when using the air conditioning and reducing when heating.

Quantitative achievements are based on calculations made only on energy savings as we could not collect enough water bills to compare the results. The most significant result is the 17% reduction in energy consumption in one participating family.

Based on Asociación Columbares experience, to be successful in an environmental education project with groups at risk of social exclusion, it is very important to involve social workers who work with families in their daily lives. Thus, social educators can reinforce concepts that are explained in class and help the families to fill the initial and final questionnaires and collecting bills. The organisation developing the project should take into account that, despite all efforts, it might still be problematic

to collect a sufficient amount of quantitative data, if compared to other groups. It is also very important to adapt the educational methodologies to the level and interests of the participants and take into account cultural issues (Ramadan, separate workshops for men and women in case of Muslims, etc.). In addition, although in all educational projects frequent contact with beneficiaries is important, when working with vulnerable groups is even more so, it is important to make them feel part of a common project and give them the opportunity to share their progress and solve their doubts during the progress of the project.

Participating families have showed a good interest in the project, in the environmental issues and especially in saving tips provided. In our opinion, **Green in Everyday Life project represents an opportunity to promote environmental eco-friendly behaviours between people who normally are outside of environmental campaigns** promoted both by public and private entities. **This empower the families and improve their economy -usually precarious- thanks to the savings achieved.** Therefore, **Green in Everyday Life project contributes to improving the quality of life of the most vulnerable groups.**

Consorzio abn, Italy

Target groups addressed in Italy were **schools**, including students, teachers, staff, schools’ directors and consequently families of children participating in the **Green in Everyday Life** project. Consorzio abn worked with six schools in Perugia (Italy), which are:

- Primary School “De Amicis”

- Primary School Mugnano
- Lower Secondary School Fontignano
- Lower Secondary School “M. Grecchi”
- Primary School Villa Pitignano
- Lower Secondary School Ponte Felcino

Total number of students (aged between 10-12 years old) participating in the project is **123**.



Brochure distributed between the beneficiaries. Consorzio abn.

Environmental audits in schools

Consorzio abn did **6 environmental audits in schools**, conducted with both the participation of teachers and students, who revealed a good knowledge about their schools’ structure. During the environmental audits, trainers from Consorzio abn have observed schools’ buildings and took note of each characteristic to assess how schools use energy in general and to detect errors in its management (i.e. heating system, water heaters,

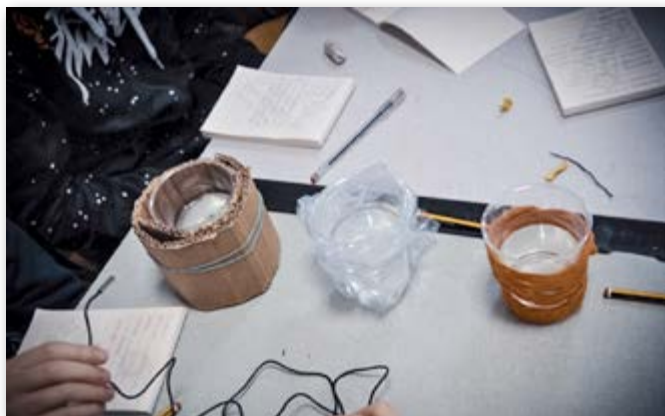
which energy is used for lighting, if they separate waste, etc.). Environmental audits have been conducted with both the participation of teachers and students who have been asked in particular to fill in the application form. In this way trainers of Consorzio abn have evaluated students’ general knowledge of the school structure and solved some doubts related, for example, to different systems for producing energy (heating and lighting systems).

Meeting or workshops

Consorzio abn has conducted **9 awareness rising workshops**. Workshops have been planned as ‘scientific experiments’ sessions to stimulate reflection and attract young students. A game-oriented approach has represented the baseline of the activities even if the general and realistic environmental issue was the core objective of workshops. Consorzio abn’s trainers focused on five different topics: energy, climate change, water, responsible consumption, sustainable mobility. Each topic was analysed through a game, videos or group activities and discussions.



Chiara Dionigi, Consorzio abn.



Workshop to built a lemon battery. Chiara Dionigi, Consorzio abn.

Moreover, trainers have guided students in some experimental activities: students have built a LEMON BATTERY (using small strips of copper wire and zinc, led and lemons to ‘demonstrate’ that energy is everywhere), measured water temperature contained in glasses wrapped up with different materials (wool, cardboard, plastic) using the aquarium thermometer to discuss about heat loss, measured pH values of water (tap water, salt water) using a litmus paper to reflect on water as a limited resource.

Educational materials

30 Saving Kits (5 Saving Kits per classroom) were also distributed. Saving Kits, designed as toolbox for scientific experiments, included: litmus paper, small strips of copper wire and zinc, 3 led lights, aquarium thermometer, a woollen thread, cardboard and a plastic bag, a little Guide with Dos & Don’ts for

protecting the Earth, gadgets (i.e. stickers, memo books). All the supporting documents for schools have been produced with an attractive style as the scope is to transfer ‘serious’ environmental information with a game-oriented approach.



Saving kit distributed between the beneficiaries. Giovanna Mottola, Consorzio abn.



Educational materials distributed between the beneficiaries. Giovanna Mottola, Consorzio abn.

Evaluation

To evaluate the changes that the project made in the participants, Consorzio abn has collected **6 Initial Questionnaires and 6 Final Questionnaires**. Questionnaires have been re-adapted for the school target. They include information about the school building characteristics such as structural features, heating system, thermal insulation devices. Initial Questionnaires were structured in five sections (Sec. 1 Energy, Sec. 2 Water, Sec. 3 Mobility, Sec. 4 Waste, Sec. 5 Food) for a total of 23 items. Final questionnaires were composed with one more final section about students' change of behaviours, modifications/adaptations or corrective measures to improve the environmental quality of schools, overall staff change of behaviours.

The achievements of the project are both qualitative and quantitative. **Qualitative achievements** refer to the change of behaviours in students, they have been involved through a participatory and game-oriented approach in different activities related to each relevant topic. For better transferring eco-friendly values, scientific experiments have been organized in which students were the main actors. By using this methodology, Consorzio abn has reached qualitative results, such as:

- More attention paid in recycling
- More attention paid in saving water
- More attention paid in saving energy
- More attention paid in sustainable mobility
- More attention paid in responsible consumption
- More consciousness in environmental issues

- In one school a vegetable garden has been planned for stimulating students even when the project will be finished.

Quantitative achievements are based on calculations made on energy/water saved (when possible), such as:

- Water consumption at school reduced from 382 litres to 194 litres.
- Energy consumption reduced by 10%, as declared by Schools' Directors.
- Stand-by red lights turned off, as showed in the final questionnaires.
- Saving water devices (double discharge button and/or flow reducer) introduced in 3 schools, as showed in the final questionnaires.
- A vegetable garden introduced in 1 school with a rainwater collecting system.

In this quantitative analysis, some difficulties appeared due to the lack of bills. Schools in Italy, in fact, don't manage their bills because the Municipality pays for their bills. For that reason it was hard to identify data we needed as in one school building there are more classrooms, belonging sometimes to different Directions. To solve this problem, Consorzio abn's trainers have connected a litre counter to the school taps for measuring students water consumption and Schools' Director have been asked to quantify energy consumption reduction in their structures.

Based on Consorzio abn experience, we recommend to assess all these possibilities at a very early stage of the programme and find alternative pathways for measuring schools consumption in accordance with schools' directors. Also, it would be helpful to monitor the students' families energy consumption when you face difficulties in quantify data related to schools. In this case, educators should ask for the involvement of Parents Associations and introduce them the programme and its objectives.

Schools, families, teachers and school directors have shown a good interest in the project, in the environmental issues and in the scientific experiments as approach for actively involving students. In conclusion, within the Italian school system, a specific need of diversified learning outcomes and methods appeared and **the Green in Everyday Life project has offered an appreciated didactic process both in its interdisciplinary contents (environmental issues) and its participatory methodology.**



Litre counter to the school taps for measuring students water consumption. Chiara Dionigi, Consorzio abn.

Insider Access, United Kingdom

The **Green in Everyday Life** project in England has been delivered by Insider Access in **communities across the Thames Valley, East of England, in HMP The Mount Prison, Milton Keynes Probation and with Penrose Roots in Luton.**

Environmental audits in households:

9 environmental audits have been done in **6 households and 3 hostels**, with **37 beneficiaries.**

These have been undertaken on a one-to-one or small group basis with home owners and hostels.

The challenges to this work have been as follows:

- Obtaining accurate data. Many households work on a mixture of estimated and actual readings for gas and electricity.
- Many households are not on water meters and

In addition to training around saving water and energy, sustainable mobility and sustainable consumption, participants received an eco savings kit, containing tools for reduction of their eco footprint.

just pay a standing charge.

- Some learners live in environments where the electric in particular is regulated by the hostel owner, so the learner has little control over the usage.

Based on the Audits, Insider Access has been asked by Penrose to deliver training in three hostels, as the audits highlighted a problem of “runaway” energy costs.

Meeting or workshops:

Insider Access was interested to explore how *Green in Everyday Life* training could be used in prison. Of particular interest was it issue of:

- How receptive the prison governors would be to idea of green living training being delivered to prisoners.
- How receptive prisoners would be to green for living training.
- The impact of the training on the hearts and minds of individuals in a custodial setting.
- The impact of the training on prisoner employability.

The training was undertaken in HMP The Mount which is a category C (Training prison) with around 1.000 prisoners. **24 prisoners** completed the training.

The model of training has been extremely effective and subsequently the training has been replicated with **8 ex-offenders** in Milton Keynes Probation, Milton Keynes Probation Hostel, **5 mental health service users** at Penrose Roots in Luton and with **6 families** in South East England.

Educational materials:

The *Green in Everyday Life* training material was broken down into five topic areas:

- Energy
- Water
- Waste and consumption
- Transport and Slow Tourism
- Climate change and auditing skills

The blended delivery approach of lecturing,

Evaluation:

At the start of the programme, prisoners completed a *Green in Everyday Life* Questionnaire and a Wheel of life questionnaire. The same questionnaires were again used at the end of the programme to record how the attitudes and behaviours of the prisoners had changed as a result of the training. **24 initial and final questionnaires** were filled by prisoners.



Posters for the dissemination of the workshops among beneficiaries. Insider Access.

games and discussion used was extremely effective and several non traditional learners started to open up with confidence in the group.

The **11 environmental kits** provided have been mainly energy saving lightbulbs. For all learners this has been a steep learning curve, challenging their perception that energy saving bulbs always took a long time to warm up and gave poor light.

The wheel of life explored the attitudes of learners in 3 key areas:

1. Attitude to climate change issues.
2. Understanding of household consumption.
3. Impact of the training on attitudes to employability.

Of real interest was the impact of the training

on the group of 24 prisoners. Could **Green in Everyday Life** really have an impact on prisoners and potentially on their resettlement?

The wheel of life showed a **positive impact on the attitude to climate change issues**, in particular their raised awareness of their own impact on the environment. Also highlighted was their **desire to encourage other prisoners to think about environmental issues**. The group of 24 prisoners had during the course become **environmental green homes ambassadors in the prison**.



Results of Green in Everyday Life project in England. Antonio Juan Gras Alarcón.

The prisoner’s awareness of personal consumption, including water and energy was also highlighted. For several prisoners learning how to conserve energy was a complete eye opener. **It was the first time they had considered their own personal consumption and how they can save costs.** This knowledge will help support their resettlement back into the community.

The wheel of life also highlighted how the **Green**

in Everyday Life training had impacted on the **prisoners attitudes towards employment**. It was interesting to note how **their motivation to achieve things in life improved** and how **their confidence to gaining employment on release increased**. This was reflected in the fact in the degree that they felt that having a criminal record would affect employment prospects on release, which during the training dropped. This highlights how **the training helped to build their confidence to face the outside world**.

The Wheel of Life was also used with ex-offenders and mental health service users, where similar patterns of personal development were tracked.

Following on from the programme two prisoners requested ongoing mentoring support with their business ideas.

- Prisoner 1 is exploring the use of hemp as a window insulation material attached to curtains.
- Prisoner 2 is exploring WEEE waste recycling linked to training opportunities for young unemployed youths.

Besides, one ex-prisoner involved in **Green in Everyday Life**, inspired by the project and with support of Insider Access, sets up social enterprise Savvy Cycling and gains UK Big Lottery funding to run cycling project in North London to engage older individuals who are non traditional cyclists and provide them with the skills, knowledge and confidence to use cycling as a means to empowerment in their lives.

In words of Insider Access, rising household bills, together with fuel poverty are key issues in England, and the **Green in Everyday Life** project looks to pilot innovative approaches that can be mainstreamed by other organisations across the UK. The project is also **very powerful in terms of changing participants hearts and minds**. It has been an eye opener how aware many people are of the topic, but feel that their actions make no difference. Through the programme this perception is challenged!

Global Playground Stockholm, Sweden

Global Playground Stockholm through **Green in Everyday Life** project tried to actively target 10 households, both families, young couples and youth in general. We succeeded to involve **6 households**, with a total of **11 people**. Five of the households are Global Playground Stockholm members and one is not. All participants of the project in Sweden were between 25 and 31 years of age, three of the households live in student apartments, one in sublet apartment and two in rented apartments.

One of the biggest challenges identified throughout the preliminary phases of the project consists in the low or even lack of interest of the housing

companies to be involved in civil society projects. Housing companies were chosen as initial resource for identifying the households with a high energy consumption rate as they cooperate with energy companies and therefore have access to the needed database. As a result, the contacted companies showed no or very little interest in providing the information regarding the households with the highest energy consumption. Besides, a lack of interest was observed when the potential participants were contacted by Global Playground Stockholm team. Apart from the poor Swedish language skills, it was observed that the overall interest in the Project and energy saving was scarce also due to the lack of knowledge and free time.



 **Green In Everyday Life**

- Bryr du dig om miljön?
- Vill du lära dig mer om hållbarhet?
- Tror du på att handla lokalt men tänka globalt?
- Vill du vara med i ett internationellt EUprojekt?
- Vill du göra detta tillsammans med andra från olika bakgrunder?

Anmäl dig till det internationella GIEL projektet och gör en skillnad!

Syfte med projektet är att förespråka ett måttligt användande av resurser genom att främja ett individuellt ansvar och uppmärksamma miljöaspekter relaterade till energi- och vattenanvändning. Genom detta ska hushåll få praktiska kunskaper och rekommendationer för att kunna minska t.ex. sin elanvändning.

Vi söker 10 hushåll i Stockholm som vill delta i projektet. Som deltagare förväntas du ta del av samt dela med dig av viss information. Du förväntas inte åta dig några specifika mål, enbart att du deltar i de 6 möten/workshops som vi kommer att kalla dig till under hösten 2015.

För mer information maila oss på: globalplaygroundsthlm@gmail.com och besök gärna vår hemsida eller [Facebook](https://www.facebook.com/globalplaygroundstockholm) sida för att läsa mer om detta! <http://www.globalplaygroundstockholm.com/>

Posters to attract participants to Green in Everyday Life project. Global Playground Stockholm.

All of the Global Playground activities are based on Hogares Verdes Programme methodology. The Swedish team worked to adapt the methodology of Hogares Verdes to the local Swedish circumstances and the target group,

designing domestic saving kits, choosing topics for workshops based on the results of audits and initial questionnaires and eventually planning the evaluation of the results.

Environmental audits in households:

The *Green in Everyday Life* project team went to visit the apartments of all participants, in order to **assess and determine how to make them more sustainable**. During the audits the team examined the recycling system, water consumption, electricity and heat, electrical appliances, windows. This also helped to put together **personalised sustainable kits for each participant**. **Six environmental audits** were conducted and **six environmental kits** were given to the participants.

Meeting or workshops:

Global Playground Stockholm articulated the programme through meetings, workshops and seminars. The chosen topics were all related to sustainability and strived to be as multi-disciplinary as possible. They touched upon energy and water saving at home, food consumption, sustainable mobility, gardening, urban planning, and responsible consumption. **Nine workshops and meetings** were organised.



Environmental audits in households.
Iryna Mikhnovets, Global Playground Stockholm.



Study visit to talk about sustainable consumption of cloths.
Iryna Mikhnovets, Global Playground Stockholm.



Workshop on vegetarian food.
Aleh Kliatsko, Global Playground Stockholm.

Educational materials:

The sustainable kits were tailored for each household. In general they contained energy saving bulbs, thermoplastic seal strips for insulating doors and windows, plants that purify the air in the house, pots for starting home gardening, recycling

bins and water-saving shower heads. Most of the participants had already energy-saving timer plugs and extension plugs. **Nine environmental kits** were given to the participants.



Saving kits given to the beneficiaries, Global Playground Stockholm.

Evaluation:

The results show that a behaviour change happened, as all participants changed their habits as far as the consumption of water, energy and food is concerned. Of great highlight is the fact that the **90% of all materials are recycled compared to 50% before** in one household; other participant **decreased the packaged food by 70%** and two others **reduced the water used in daily showers and the temperature of heating.**

Reflections and recommendations from NGO Global Playground Stockholm after the participation in **Green in Everyday Life** project are positive and structural. Global Playground Stockholm considers the results of the Green in Everyday Life project satisfying and holds some reflections and recommendations. To start with, the project brought in new knowledge that improved the awareness of all participants of their consumptions attitudes. Simple tools and information greatly contributed to the habit shift. **Small changes can make a big difference when moving on to a more environmentally friendly lifestyle:** this motto inspired Global Playground throughout our activities. The project's main aim was to achieve behaviour change by raising awareness about everyday smart saving tips. This type of approach was chosen due to the impossibility of measuring the household's consumption or energy bills. The participants received their Sustainable Kits at the dedicated workshop, where they also received information about the content. A LED-light bulb or a water-saving shower cap: all products

responded to the criteria of simplicity and easy availability. The involved participants expressed a high interest in the innovative methods and practices discussed during the whole project period in frames of different workshops. The amount of participants was however lower than expected from the beginning of the project due to the lack of interest in the area of sustainability both from the housing companies as well as from the tenants. The biggest challenge for the project's team consisted in reaching the participants of different ages, social and ethnic backgrounds who reside in Stockholm. Besides, the other challenge was to establish an effective dialogue with housing companies for a common cooperation and access to the data when it comes to households which consume the most energy and water in the house or the area. **This project is considered to be the first step in the process of raising awareness of people within the urban area of the capital city and needs to have further work on finding solutions on how to change people's behaviour which will improve their everyday way of living.**



Activities developed in Sweden with Green in Everyday Life project. Antonio Juan Gras Alarcón.

Association Bassin Guir for the Development and protection of environment, Morocco

Bassin Guir association for development and protection of the environment has created a network to work on **Green in Everyday Life** project. The Moroccan network includes **four associations from four different communes** in the area of Figuig, which are:

- Union development initiative from Bouanan
- Friends of the Earth from Boudnib
- Rural association of culture and tourism from Bni Tadjit
- Bassin Guir association from Ain Chouater as coordinator of the project in Morocco.

The plan has focused on the following **principles**:

- **To engage civil society and civil actors**, in order to take into consideration the environmental approach and the responsible consumption habits into their actions and plans.
- **To engage students**, as fresh citizens, **to raise awareness** among students **about the importance of preservation of water and energies**.

Environmental audits in households

15 environmental audits were done in **15 households**, reaching **15 families** with an average of 6 people by family, so the **total number of beneficiaries is about 90 persons**. Environmental audits in households consists of a number of visits **to find out the energy used into households**, either electricity, water or gas, which are the most common used in the area of Figuig. Which are the most used, how they are used, and their impact on environment and bills. Environmental audits in households are accompanied with the involvement of a member of the family and especially parents in order to involved them more closely in the **Green in Everyday Life** project.

The main remarks noted during the process of the

Meeting or workshops

Bassin Guir association has organised a serie of **9 workshops** in coordination with four communes in

- **To spread environmental ethics**, which is meant to grow with the students and diffused into family members in the house, through the students. The more involved, the more effective we can be toward our environment.
- **To adopt the environmental practices**, by providing the beneficiaries from this project the materials and implements for practical use in order to acquire key ability to make those practices a first nature of humans' habits.
- **To understand the context of environmental risks in Morocco and in order to grow responsibility for the environmental consumption logic**.

To start, Bassin Guir made a definition of the current context and decided the target group should include different ages and be gender-mixed. Bassin Guir from Morocco has chosen to **work with schools in the first stage** and include other society actors in a second phase.

households' audits, regarding the consumption habits of the beneficiaries (families), have founded a list of recommendations serving the actors inside the project to affect the consumption habit of the beneficiaries of the project:

- Saving energy and water is also saving money on bills.
- Turn off home electronics after use.
- Turn off red standby light for home electronics (TV's, computers, etc.)
- Use buckets for saving water for a second use.
- Use water-saving taps and head shower in order to control the water output.
- Use energy efficient lamps (11W instead of 40W).

93

the area of Figuig : Ain Chouater, Boudnib, Bouanan and Bni Tadjit. The activities in the area were mainly



Workshops in schools. Mohamed Mouhimdat, Bassin Guir Association.

for raising awareness on the environmental risks and engage the civil society on the stated issue.



Workshops in schools. Mohamed Mouhimdat, Bassin Guir Association.

Through schools, three of the associations' partners from Boudnib, Bouanan and Bni Tadjit, workshops have been held in coordination with teachers. Meanwhile, in Ain Chouater Bassin Guir organized a forum with the Youth' council in the East area of Morocco.

Some measures have been discussed in order to take into consideration in the policies of the

communes:

- Tax system to control the management of waste.
- Control the rubbish trucks.
- Separate waste and thinking of recycling via a number of methods which are functional and artistic.

Dissemination of activities included banner and brochure to make the project visible in the communities and communicate environmental information.



Banner to disseminate Green in Everyday Life project in the community. Mohamed Mouhimdat, Bassin Guir Association.



Brochures given to the beneficiaries. Bassin Guir Association.



Educational materials



Saving kits given to participants. Mohamed Mouhimdat, Bassin Guir Association.

15 environmental saving kits and questionnaires were distributed. Kits contained low-cost devices” to use in order to save and mind the output of energy and water consumed in the household, it contains:

- Five economic lamps
- One shower-head
- One bag with palms
- One modified mixer
- One galvanized iron bucket
- One ceramic pot

Evaluation:

For the general view of the project, **most of the beneficiaries of the region of Ain Chouater have benefited from the raising awareness’ workshops.** Yet, the project should be conducted in other areas to extend the experience and test the effects with different geographical and economical contexts. As well as the introduction of the environmental approaches in schools/ **School programs would be a plus to inform and sensitize the population through the students’ learning.**

the good reputation of the association, which made communicating with people a lot easier, they were in fact more receptive.

Bassin Guir association suggests the usefulness of elaborating and distributing a **guide of environmental good practices** in order to generalize the practices of saving energy, as well as the environment as a whole. Besides, it should be necessary to expand and replicate the project with more beneficiaries.

The main challenges were mostly about the adaptation of the questionnaires and fitting them to the context of Ain Chouater. Another difficulty was encountered when engaging people into this project dynamic. This obstacle was overcome with

The use of a social network formed by different involved organisations, **is a very powerful communication tool to spread the environmental culture** among the wide population from different ages and genders.

East & WE Center for Human Resources Development, Jordan

The **Green in Everyday Life** project in Jordan has been delivered by East WE Center for Human Resources Development (WE Center) in partnership with Green Generation Foundation and Petra Green community Enterprise in a rural village and other

homes in the main cities.

Green in Everyday Life project in Jordan aims to **change the behaviour of the targeted segment of the community toward a green life style**

that considers the environmental impacts of each daily behaviour, especially in the field of water, energy and waste disposal, but also in sustainable mobility, sustainable consumption and climate change.

The water issue was one of the main focus, because Jordan is the second poorest country on the world in terms of water, so we gave it the highest priority in this project.

Environmental audits in households

20 environmental audits were conducted, representing 100 people (Jordan families has in average 5 members). WE Center selected 10 youth out of the 20 participants to be the **Green in Everyday Life** project team who went to visit the apartments of all participants, in order to assess and determine how to make them more sustainable. During the environmental audits, the team examined used lighting bulbs, water consumption, electricity and heat, electrical appliances, windows. After the environmental audits, the project team gave the families a saving kit for the householders as a gift, including customized tools that are needed for their home to save water and energy and to sustainably.

Educational materials:

The most powerful and effective material used in this project were the saving kits, because most of people like gifts, especially if they feel the benefit of it and it, which was explained through an awareness session.

The saving kits included:

- LED Lighting bulb.
- Water aerators for saving water.
- Tape for doors and windows thermal isolation.
- Shower heads.
- Water saving device for flushing.
- RO Filters Rationalization Unit (If Needed).
- Fibre Bag.
- Vegetable seeds.

WE Center also used some other educational materials during the workshops such as

We targeted a 20 active and motivated youth in our workshops that represented 100 from their family members from Mahis Village, who will take the responsibility of spreading the word of environmental awareness among their neighbours and peers, and we increased their experience by implementing the environmental auditing with their participation and then asked them to do it by themselves.

consume the resources.



Environmental audits in households.
Ahmad Alnoubani, WE Center.

presentations and tools to prepare the activities.



Saving kits given to the beneficiaries.
Ahmad Alnoubani, WE Center.

Meetings or workshops:

9 workshops were organized by WE Center to **prepare professional environmental Auditors** who are able to lead the **Green in Everyday Life** project, plus we highlighted several global environmental topics as the main reason for our movement. We gave an advanced training on how to save water and energy in our homes plus in how to live as a responsible consumer, where we

mentioned the topics (Sustainable consumption, waste recycling and mobility).

We started our workshops with awareness of the global environmental issues and then followed by advocacy skills and then we get into technical trainings related to water and energy saving plus the sustainable living.



Workshops in rural villages and cities. Rawan Alassaf, WE Center.

Evaluation:

Our methodology was based on doing first the workshops, second some campaigns and finally the environmental households auditing.

Based on the experience, **the methodology was very useful and built the needed capacity for the trainees to become a professional Environmental Auditors.**

After the implementation of this project, participant's behaviour changes were very clear and in both qualitative and quantitative, as are described below:

Quantitative results:

- By replacing all light bulbs with LED Energy saving ones, the beneficiaries saved **more than 20% of their electricity bill**. Plus being aware of new behaviours that save energy that is the main source of CO2 emissions.
- By using water saving devices at all taps and do full maintenance for the leakage at their homes, plus decreasing the valium of the flush tanks, the beneficiaries saved **more than 35% of their water bills**.

Qualitative results:

- The homes at the village that was targeted mostly **grow their own fruits and vegetables**, but the problem was that the market in Jordan has no ecological or fair trade labels.
- **Most of the houses prepared a special area to dispose the organic waste** that was biggest amount of waste produced from their homes, is was a bit hard to find a place in some homes especially apartments, on the other hand, **they all reduced the usage of plastic stuff**.

One of the biggest challenges we faced in this project is the generalised lack of environmental awareness of Jordan population, who mainly are interested only in the economical saving. In this sense, **Green in Everyday Life** project exactly touched their needs in focusing on the **economic saving throw protecting the environment and save energy**. We focused also in water as one of our most important issues, because Jordan is the second poorest country of water in the world and at the same time it is inexpensive, so **we pointed in the importance of water security to motivate people to save water**.

So far we have created a great team of well trained and experienced group of environmental auditors, who are so motivated to sustain this project so they prepared a **very well developed plan to keep going in turning more homes to become eco friendly**, because we saw the perfect interaction

of the people who benefited from this project that indicates that the methodology was successful and the implementation was also perfect, **we are doing our best now to get more funding and give this project more voluntarily efforts to make all homes in Jordan to become Green.**

ANNEX 1.

Model of initial questionnaire:

HOUSEHOLD CODE:

GREEN HOMES INITIAL QUESTIONNAIRE.

The data obtained from this survey will be used to better understand the characteristics of starting point of households participating in the programme. The data will be used for statistical purposes and references to specific participants will not be used. Thanks for your cooperation.

* **Type of housing you live in:**

- Flat
- Attached house
- Semi-detached house
- individual house

* **Approximate floor area of the house:** _____ m²
(not including open terraces, yards or garages)

* **Number of persons living in the house:** _____

ENERGY:

* **What is the main heating system in your home?**
(mark only one)

- I don't have one
- Radiators
- Underfloor heating
- Fireplace
- Heater

* **What type of energy does the main heating system use?**

- electricity
- diesel fuel
- natural gas
- wood/biomass
- Other: _____

* **The main heating system in your household is:**

- Individual
- Community

Do you use any other heating system as a support?

- Fireplace
- Wood using heater
- Electric radiators
- Other: _____

* **What's the winter temperature in different places in your home?**

	Living room/kitchen	Bedroom
Temperature in the morning (°C)		
Temperature in the afternoon (°C)		
Temperature during the night (°C)		

* **What type of energy do you use to produce hot water?**

- electricity
- diesel fuel
- natural gas
- wood/bioma
- other: _____

* **Do you have air conditioning**

- YES
- NO

* How many times per week do you use washing machine? _____

How many times per week do you use dishwasher? _____

* How many electronic devices do you maintain in stand-by mode? _____

(In this situation there usually you can see a small red light on)

* How many light bulbs, halogen bulbs and fluorescent light bulbs are there altogether in the house? _____

* Are there any low-consumption light bulbs?

- YES
- NO

How many? _____

* Indicate your consumption of water, electricity, natural gas and / or diesel fuel in the year prior to their participation in "Green Homesprogramme" (fill in the number of boxes needed to cover one year).

Water

Invoice period						
Consumption (m ³)						

Electricity

Invoice period						
Consumption (KWh)						

Natural gas

Invoice period						
Consumption (m ³)						

Oil fuel

Invoice period						
Consumption (litres)						

WATER

* Does your house has an individual water consumption meter

- YES
- NO

* Does your house have any water saving systems installed?

- YES
- NO

• If so, indicate which ones:

WC tank

- Double discharge button
- Discharge interruption button
- Object to reduce capacity

Taps / shower

- Flow reductor
- Aerator
- Low-flow shower head

*** Do you have your own garden**

- YES
- NO

• If so:

- It's private (for your household)
- It's shared

*** If its private, what is it's extensions:** _____ m²

*** What's its main watering system:**

- manual
- automatic

*** Do you have a pool?**

- No
- Yes, a private one
- Yes, shared with other households

• If you have your own pool, how often do you completely change the water in it?

- every 4-6 years
- every 2-3 year
- once per year
- 2-3 times per year
- more than 3 times per year

MOBILITY

*** vv* If you have a car, indicate the number of kilometres driven in the year prior to your participation in "Green Homes"**

(You can look it up from the oil change bills or repairs to relate dates and odometer data. Fill in the number of boxes needed to cover one year).

Period						TOTAL
Car 1 (Kms)						
Car 2 (Kms)						
Car 3 (Kms)						
Motorcycle 1 (Kms)						

*** Indicate, where appropriate, major trips made in the last year by different household members, using different means of transportation except your own vehicles (record only routes with distances exceeding 1,000 km in round trip. Do not include trips made for work).**

101

Trip	Means of transport

ANNEX 2.

Model of final questionnaire:

HOUSEHOLD CODE:

GREEN HOMES FINAL QUESTIONNAIRE.

The data obtained from this survey will be used to better understand the characteristics of starting point of households participating in the programme. The data will be used for statistical purposes and references to specific participants will not be used. Thanks for your cooperation.

* **Type of housing you live in:**

- Flat
- Attached house
- Semi-detached house
- individual house

* **Approximate floor area of the house:** _____ m²
(not including open terraces, yards or garages)

* **Number of persons living in the house:** _____

ENERGY:

* **What is the main heating system in your home?**
(mark only one)

- I don't have one
- Radiators
- Underfloor heating
- Fireplace
- Heater

* **What type of energy does the main heating system use?**

- electricity
- diesel fuel
- natural gas
- wood/biomass
- Other: _____

* **The main heating system in your household is:**

- Individual
- Community

Do you use any other heating system as a support?

- Fireplace
- Wood using heater
- Electric radiators
- Other: _____

* **What's the winter temperature in different places in your home?**

	Living room/kitchen	Bedroom
Temperature in the morning (°C)		
Temperature in the afternoon (°C)		
Temperature during the night (°C)		

* **What type of energy do you use to produce hot water?**

- electricity
- diesel fuel
- natural gas
- wood/bioma
- other: _____

* **Do you have air conditioning**

- YES
- NO

* How many times per week do you use washing machine? _____

How many times per week do you use dishwasher? _____

* How many electronic devices do you maintain in stand-by mode? _____

(In this situation there usually you can see a small red light on)

* How many light bulbs, halogen bulbs and fluorescent light bulbs are there altogether in the house? _____

* Are there any low-consumption light bulbs?

- YES
- NO

How many? _____

*Indicate your consumption of water, electricity, natural gas and / or diesel fuel in the year prior to their participation in "Green Homes programme" (fill in the number of boxes needed to cover one year).

Water

Invoice period						
Consumption (m ³)						

Electricity

Invoice period						
Consumption (KWh)						

Natural gas

Invoice period						
Consumption (m ³)						

Oil fuel

Invoice period						
Consumption (litres)						

WATER

* Does your house has an individual water consumption meter

- YES
- NO

* Does your house have any water saving systems installed?

- YES
- NO

• If so, indicate which ones:

WC tank

- Double discharge button
- Discharge interruption button
- Object to reduce capacity

Taps / shower

- Flow reductor
- Aerator
- Low-flow shower head

*** Do you have your own garden**

- YES
- NO

• If so:

- It's private (for your household)
- It's shared

*** If its private, what is it's extensions:** _____ m²

*** What's its main watering system:**

- manual
- automatic

*** Do you have a pool?**

- No
- Yes, a private one
- Yes, shared with other households

• If you have your own pool, how often do you completely change the water in it?

- every 4-6 years
- every 2-3 year
- once per year
- 2-3 times per year
- more than 3 times per year

MOBILITY

*** vv* If you have a car, indicate the number of kilometres driven in the year prior to your participation in "Green Homes"**

(You can look it up from the oil change bills or repairs to relate dates and odometer data. Fill in the number of boxes needed to cover one year).

Period						TOTAL
Car 1 (Kms)						
Car 2 (Kms)						
Car 3 (Kms)						
Motorcycle 1 (Kms)						

*** Indicate, where appropriate, major trips made in the last year by different household members, using different means of transportation except your own vehicles (record only routes with distances exceeding 1,000 km in round trip. Do not include trips made for work).**

Trip	Means of transport

After the programme, what new elements have you introduced in your household for saving water and energy? Please tick.

- Installation of energy-saving light bulbs
- Purchase of energy efficient electric appliances
- Lower usage of the dishwasher
- Lower usage of the washing machine
- Installation of aerators
- Lower boiler temperature
- Water saving system installation in the WC tank
- Lower temperature during winter
- Turning off electric appliances on standby
- Improves irrigation systems
- Other _____

GREEN 4LIFE MANUAL

Green in 
EVERYDAY LIFE



Cofinanciado por el
programa Erasmus+
de la Unión Europea



SUBSECRETARÍA DE
AGRICULTURA, ALIMENTACIÓN
Y MEDIO AMBIENTE
PARQUES
NACIONALES
CENTRO NACIONAL
DE EDUCACIÓN AMBIENTAL

