Project co-financed by the European Regional Development Fund

**School Low Carbon Footprint in Mediterranean cities**

Deliverable 3.3.3

# EduFootprint Competition Award Rules

# EDUFOOTPRINT

# School Low Carbon Footprint in Mediterranean Cities

**PRIORITY AXIS:** Fostering Low-carbon strategies and energy efficiency in specific MED territories: cities, islands and remote areas
**OBJECTIVE:** 2.1 To raise capacity for better management of energy in public buildings at transnational level

**DELIVERABLE NUMBER**: 3.3.5

**TITLE OF DELIVERABLE:** Guidelines for the definition of rules and operating methods of the competition awards among the pilot buildings of the project, in order to use the competition as an instrument to motivate schools in testing activities.
EduFootprint Competition Award rules.

**WP n. 3:** Testing

**ACTIVITY N. 3.3.5**

**NAME OF ACTIVITY:** Preliminary activities

**PARTNER IN CHARGE:** Province of Treviso

**PARTNERS INVOLVED:** ALL PARTNERS

*Date: 20/12/2017*

# Summary

# THE PROJECT

The overall objective of EduFootprint project is to better manage, plan and monitor the energy consumption in public buildings in the Mediterranean area. EduFootprint will achieve this objective focusing on the public schools and using and innovative approach based on the Life Cycle Assessment (LCA), considering not only the energy direct impact on buildings (consumption), but also the indirect ones (public tenders, increase of users' awareness, behaviors etc.)
The competition between schools is part of this European project that involves several school buildings of the partners and aims at both energy efficiency and environmental sustainability of the buildings.
In this context, the competition is therefore to be considered as one of the main tools for the promotion, among students, teachers and school staff, of virtuous knowledge and behaviours related to renewable energy sources, rational use of energy, of water resources and of major consumer products, waste management and sustainable mobility, with attention to the issue of green purchasing.
The competition between the schools derives from a good practice implemented by the Province of Treviso which, to date, has reached its sixth edition. The Province has always been involved with local schools and administrations, respecting the environment and the resourceful use of resources, especially the non-renewable ones, by promoting good practices in schools with a reflection even in the household, as good practices can be exported from pupils and teachers in their daily lives.

# THE COMPETITION

The proposed competition concerns the main issues addressed by the EduFootprint project in consideration of the fact that the innovative approach of the "Life Cycle Assessment (LCA)" project takes into account both the direct impacts of energy (consumption) and indirect ones (public procurement or human awareness and behavior).The same competition will take into account of the variety of the actions implemented in school buildings (on the basis of the type of schools and level involved, from nursery schools to universities) and of the countries participating in the project, ensuring the adaptability of initiative in different contexts.
Therefore, this document represents a Guideline from which each partner can draw to adapt a possible contest to own needs and possibilities.
The themes and activities that may be addressed in the competition are listed below:

- Renewable energy sources (workshops and school projects, awareness-raising activities, etc.)
- Energy saving (good practices, awareness raising, consumption monitoring, etc.)
- Sustainable mobility (car-sharing, km count, pedibus, bicycle use, etc.);
- Tutoring activities between schools;
- Activities related to the use of "Edufootprint calculator";
- Activities related to the use of "Guideline for the energy efficiency of buildings" (establishment of "energy team", meetings between members of the ET, etc.);
- green purchases;
- management of consumer products at school (paper, detergents, stationary products, etc.);
- optimization of use of the equipment (computers, lim, printers, etc.);
- reduction of water consumption;

- food.

The procedures for running the competition are summarized as follows.

Schools present one or more activities related to the themes described in the project, taking also inspiration from the material provided and the good practices described during EduFootprint's training activities. School and extracurricular activities, multimedia and social media, communication and awareness activities will be evaluated too.

Each school will calculate the actual emission reduction data using the EduFootprint calculator and this data will contribute to the formation of a final ranking

The presented projects must be able to be monitored through indicators selected among those that are analyzed by the EduFootprint project and drawn directly by students and teachers, considering for example the reduction in consumption or waste production. This will allow for the evaluation and assignment of specific scores for each school not only on the basis of the quality of the proposal but also on the basis of the results achieved.
Students and teachers will use the EduFootprint calculator to perform such monitoring, whose results will also be visible to everyone thanks to the EduFootprint APP.

# EVALUATION AND AWARDS

The materials produced, and the activities organized by each school will be examined by a specific Commission established by each partner and the evaluation of each school will be expressed by a total score obtained from the sum of the individual scores awarded for each section of the competition. Each section may have different weights in the calculation of the final score as each partner can set them at own discretion.

As mentioned above, the evaluation of the reduction of $CO_2$, achieved thanks to the implementation of the activity, will instead take place using the calculator developed by the EduFootprint project and will be determined during the final reporting phase.
In addition, the score will be subdivided into the 5 main sectors dictated by the Edufootprint calculator and that is:

- Emissions due to building consumption;
- Emissions due to materials and equipment used;
- Emission due to catering services;
- Emissions from transport;
- Emissions from waste production.

The general evaluation will follow the parameters described below that are adaptable to all the regional contexts involved in the project (the indicated weight is an example and each partner can adapt it as it sees fit):

| WEIGHT Pi | SECTIONS | SCORING MODE Pui | |
|---|---|---|---|
| | **Educational activities** | | |
| 30% | Laboratories and school projects on renewable energy sources | For each laboratory/project | For number of classes or students involved |
| | Activities and projects for energy saving (thermal and / or electrical) | For each activity/project | For number of classes or students involved |
| | Sustainable mobility initiatives | For each initiative | For number of classes or students involved |
| | School waste activities and projects on waste management and circular economy (waste reduction and rational and efficient use of materials and resources such as water, paper, stationery, cleaning products, etc.) | For each activity | For number of classes or students involved |
| | **Reduction of $CO_2$ emissions based on the results of the EduFootprint calculator** | | |
| 30% | Reduction of energy and water consumption (Electric, Heat and Water Consumption) | for each percentage point of reduction obtained with respect to the baseline value | |
| | Reduction of the consumption of materials used in the school (paper, detergents, etc.) | for each percentage point of reduction obtained with respect to the baseline value | |
| | Reduction in catering services | for each percentage point of reduction obtained with respect to the baseline value | |
| | Reduction in transport and mobility | for each percentage point of reduction obtained with respect to the baseline value | |
| | Reduction of waste | for each percentage point of reduction obtained with respect to the baseline value | |
| | **Use of tools** | | |
| 5% | Use and study of tools for school projects (thermal imaging cameras, solar panels, luxometer composting, air quality gauges, thermometers, energy meters, etc.) | For each tool used | For number of classes or students that use the tools |
| | **Promotion inititiatives, communication and sensibilization** | | |
| 20% | Involvement of staff ATA and DSGA (purchases, office consumption) | For each initiative | |
| | Involvement actions of the classes (Assemblies, meetings, presentations) | For each initiative | For number of classes or students involved |
| | Initiatives carried out in the buildings (meetings, events, call for proposals...) | For each initiative | |
| | Organization of extracurricular initiatives (citizen involvement, administration, associations, etc.) | For each initiative | |
| | Use of social networks to promote activities | YES/NO | |

| WEIGHT Pi | SECTIONS | SCORING MODE Pui | |
|---|---|---|---|
| | and initiatives (Facebook, Youtube, Twitter, etc.) | | |
| | Use of the school's web site to promote activities and initiatives | YES/NO | |
| | Production, publication and dissemination of information material (brochures, ppt presentations, leaflets etc.) | n° institutions /stakeholder involved (municipalities, associations, parents, etc.) | n° articles / brochure for each event |
| | Realization, publication and dissemination of video informative | YES/NO | |
| | **Tutoring activities** | | |
| 5 % | Tutoring activities carried out by schools (given or received):<br>- ability of schools of creating thematic communication channels integrated with other schools within common actions;<br>- peer education projects for example, debates on specific topics online | For each class that give or receive tutoring | |
| | **Environmental management system of the building** | | |
| 10% | Establishment of the Energy Team as foreseen by the guidelines and modality of carrying out the management activities | n° meeting | |
| | Preparation of a building energy action plan (or improvement plan) | YES/NO | |
| | Implementation of rules and procedures aimed at containing and optimizing consumption (energy, water, consumer products ...) | YES/NO | |

The total score will be given by the weighted average of each score:

$$P_{tot} = \sum P_i \cdot P_{ui}$$

As for the kindergartens involved in the project, the activities listed above can be reviewed to be adapted to the age groups involved.

It should be noted that each partner, based on the type of schools involved, can divide the ranking among the various grades of the schools involved or assign a different weight to each degree (from a kindergarten it's not possible to expect the same result that derives from a university).

The schools that have presented the best experiences and activities and who have achieved the highest scores will be awarded with recognitions and / or material useful for the didactic activity that will be defined by the promoter of the competition.

For example, they might be considered:

- Cash prizes to be allocated to each school;
- Vouchers for the purchase of teaching materials;
- Vouchers for the purchase of instruments designed to measure energy parameters;
- Free one day or half day trip;
- Free sports activities organized by the school (e.g. free entrance to the pool, etc.);
- Setting up an "energy lab" within the winning school equipped with all the tools needed to carry out environmental education activities (e.g. luxometers, energy meters, air quality meters, prototypes, etc.) and which could be used by each class.