

D2.5 "EYEManager Championship Rules Manual"



With the support of

Intelligent Energy Europe



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1. BACKGROUND OF TASK 2.4

Task 2.4 of WP2 is directly related to the work foreseen to be done in the framework of WP4 **«EYEManager Championship»** of the Project, which is also considered as the core of it. The **key tasks** foreseen in Task 2.4 are:

- a) To form a TEG that will define all the aspects related to the "International Championship", in particular:
 - 2.4.1 International Teams composition.
 - 2.4.2 Definition of Game's phases.
 - 2.4.3 Definition of Scores.
 - 2.4.4 Designing of Awarding Criteria.
- b) To prepare the EYEManager Championship Rules Manual

So, the specific work tasks constituting the work to be done in the frame of WP4 need to be also summarized here. During the 12 months of WP4, the international teams - composed by students of all the 9 involved European countries - must face the problem of energy management of the places where the students are spending most of their lifetime (i.e. their schools and homes). The **WP4's Specific Tasks** are the following:

4.1 Organization of EYEManager Championship Kick off Meeting

- 4.1.1 Logistic organisation and hosting of students
- 4.1.2 International Teams (6) Composition
- 4.1.3 Organisation of a team building session
- 4.1.4 Presentation of the Teams (6)
- 4.1.5 Public presentation of the EYEManager Championship

4.2 EYEManager Championship (implementation)

- 4.2.1 First phase School management
- 4.2.2 Second phase Home Management
- Energy audits (in schools / houses)
- Filling in the Energy Audit Grid (Form)
- Study cases assignation (3 for Schools and 3 for Houses)
- Designing of 3 Schools & 3 Houses Energy Saving Plans
- Evaluate the investments required and the economic savings deriving from the interventions.

4.3 Organization of EYEManager Championship Awards

- 4.3.1 Logistic organisation and hosting of students
- 4.3.2 Presentation of the Energy saving plans
- 4.3.3 Awarding of the EYEManager Champion Team



From the above description, it was derived that the work foreseen in WP4 (i.e. the implementation of the EYEManager Championship) can be split in 5 distinct Phases (this way fulfilling the 2nd of the TEG4 objectives), which are described in the following paragraphs. For each one of these Phases, the tasks that have to be carried out are described, and at the same time the necessary rules are set.

2. THE "EYEMANAGER CHAMPIONSHIP RULES"

2.1 Phase 1: International teams' composition

This phase (first) of the EYEManager Championship is in direct relevance with **WP4** *Task 4.1: Organization of the EYEManager Championship Kick off Meeting.* It also coincides to the first objective of TEG 4 tasks. The choice to build international teams composed by youngsters coming from 9 European countries answers to the need to favour the collaboration among students and to give them the opportunity to face energy issues in different contexts.

After the energy training organised by the involved schools (as foreseen in WP3), each selected class of the 9 schools involved in the project will be divided in 6 groups, which will form parts of the 6 International Teams. The rule is that each international team will be composed by 27 students, 3 from each involved country (and class) for a total of 18 students per country (class). The composition of the 6 International Teams will be as presented in the following Table:

Students	ΙT	SE	ES	GR	PT	SI	PL	RO	BG	Total
Team 1	3	3	3	3	3	3	3	3	3	27
Team 2	3	3	3	3	3	3	3	3	3	27
Team 3	3	3	3	3	3	3	3	3	3	27
Team 4	3	3	3	3	3	3	3	3	3	27
Team 5	3	3	3	3	3	3	3	3	3	27
Team 6	3	3	3	3	3	3	3	3	3	27
Total	18	18	18	18	18	18	18	18	18	162

Interesting remarks:

- Although in the work-programme it is written that: "...each school could decide to involve more members on the base of the number of students of each class", this is not recommended here, as all international teams should be formed by exactly the same number of students (for equity reasons). In addition, if one of the participating schools would decide to involve more students, then their number should be divided by 6 (i.e. the number should then be 24, 30, 36, etc.). However, this would alter the nature of the competition.
- ➤ The definition of the composition of the groups of 3 students per class/ country that will form part of the each one of the 6 international teams will have to be

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made **no later than September 2009**, i.e. at the beginning of school year 2009-2010.

2.2 Phase 2: Schools and Houses Energy Audits

This phase is directly correlated to *Task 4.2: EYEManager Championship* (*implementation*), and more specifically to the part of this task that is related to the implementation of Energy Audits to Schools and Homes, which is the first part of the Schools and Homes Energy Management (EM). It will be implemented in the following individual steps:

1) Definition of the premises to be audited – As is foreseen in the work-programme, 2 schools and 2 houses in each one the 9 countries participating in the project will be analyzed according to the following table:

Energy Audit	ΙT	SE	ES	GR	PT	SI	PL	RO	BG	Total
Schools	2	2	2	2	2	2	2	2	2	18
Houses	2	2	2	2	2	2	2	2	2	18
Total	4	4	4	4	4	4	4	4	4	36

It is important to select the 2 schools and 2 houses per country in a way that will ensure that the buildings to be audited will be of the same more or less "energetic situation". This means that neither the schools nor the houses should be old enough and that certain construction principles (e.g. appropriate orientation, use of openings, etc.) have been followed for them. For the proper and objective choice of the 2 schools and 2 houses, an expert from the LEAs will be responsible.

The following **pre-conditions** should be taken into consideration:

- a. The age limit for **school buildings** should be between 15 and 50 years. If possible, the one of the energy audits should be held in the building of the school from which come the contestants. If this is not possible, e.g. because of the age of existing buildings or other impediments (alterations, renovations, etc.), another school building in the same locality can be chosen. Whichever the case, there is a need for a second school to be involved in the procedure (in which the 2nd Energy Audit will take place), and this has to be defined as earlier as possible.
- b. In residential buildings (i.e. houses), the age limit is decided to be between 10 and 25 years. The one of the houses could be that of the teacher in charge of the class that participates in the EYEManager Championship, while the second house could be one of the students'. Blocks of flats cannot be included, as this type of houses (i.e. apartments) usually doesn't have the requested autonomy for defining and implementing energy efficiency interventions. Detached houses, with an area between 100 and



200 m², and with individual heating and/or cooling systems, are the preferred option.

- 2) Energy audit The students, counselled by expert technicians from the LEAs, will carry out the energy audit of the different places/objects of intervention, with the aim to collect data concerning the energy consumption, as well as the efficiency of the buildings, their plants and the rest of equipment used. These standard Energy Audits will have to be carried out according to the guidelines provided in the "EYEManager Guide".
- 3) Energy Audit Form For each one of the audited places, an Energy Audit Form (else "Grid"), which will be downloadable from the EYEManager Championship Database, has to be filled in by each one of the "class/ country groups" (i.e. 4 such Forms are expected from each Group / for each country).

Recommendation: All 18 students per class/country that participate in the EYEManager Championship should be involved in all Energy Audits that will be carried out in their countries. This way, they will have the opportunity to examine closely the situation of the premises audited and to transfer – in another phase – their experiences in the International Teams in which they will further participate.

<u>Important notice</u>: The audits of schools and houses in each one of the 9 involved countries will have to be implemented between Months 13 and 16 of the Project, i.e. **between September and November 2009**. The activities foreseen for this phase will have to be carried out co-instantaneously in each involved country.

2.3 Phase 3: EYEManager Championship's Kick-off Meeting

In the beginning of the competition, the *EYEManager Championship Kick off Meeting (KoM)* must be held. This will be scheduled as an "International Campus", in which 9 students from each class - for a total of 81 youngsters - plus 9 more youngsters belonging to the class with the same nationality of the location of the meeting will participate. As it was decided, the KoM of *EYEManager Championship* will be organised at the end of **November 2009** in **Slovenia** (Velenje). The detailed composition of the group of students that will be present in the KoM is shown in the Table below:

Type of the event	Location	IT	SE	ES	GR	РТ	SI	PL	RO	BG	Total
EYEManager	SI										
Championship Kick	(Slovenia)	9	9	9	9	9	18	9	9	9	90
off Meeting											

More specifically, the *EYEManager Championship Kick off Meeting* will be organised as follows:



- 1. During the 1st meeting day, the international teams will be officially set up and a teams' building session will be held in order to let the teams' members to get to know each other.
- 2. In the 2nd meeting day, the official presentation of the EYEManager Championship and of the teams formed will be made. In addition, as the Energy Audits in the various countries will have been accomplished by the date that the *EYEManager Championship Kick off Meeting* will be held, short presentations (using Power Point, multimedia, other...) of the selected and approved buildings and their energy analysis made per country will be made by each country's group of participating students during this second day of the KoM.

Then, at the end of the day, the *Case Studies Assignation* will follow. More precisely, 6 Case Studies (3 schools in the 1st step and 3 houses in the 2nd step) will be assigned to each one of the 6 international teams. For this purpose, a "ballot procedure" will be used: after assigning to each one of the 18 audited schools and the 18 audited houses a corresponding integer number, the Project Officer (if being present in Slovenia) will be asked to draw from the ballot-box for schools the 3 cases that will be assigned to each one of the international teams and from the houses' ballot-box the relevant 3 house cases per team.

2.4 Phase 4: Schools and Houses Energy Management

This is also directly correlated to *Task 4.2: EYEManager Championship* (*implementation*) of **WP4**, and more specifically to the part of the sub-task corresponding to the Schools and Homes Energy Management (EM) procedure itself. In the discrete steps foreseen for this specific phase of the EYEManager Championship the members of the teams will work together at international level. The key aspects of this Phase are the following:

1) Energy Saving Plans – Each team must develop the Energy Saving (ES) Plans of the assigned case studies. The "Energy Saving Plan" will be a combined asset of interventions on the building, plants, equipments, behaviours, etc. The ES Plans will have to be developed according to the principles/tips/guidelines provide to the students by the "EYEManager Guide". Each team will develop 6 Energy Saving Plans as follows:

Energy Saving Plans	Schools	Houses	Total
Team 1	3	3	6
Team 2	3	3	6
Team 3	3	3	6
Team 4	3	3	6
Team 5	3	3	6
Team 6	3	3	6
Total	18	18	36



2) Team Energy Wallet – Each team will possess an Energy Wallet, which, step by step, will gain or lose money on the base of the investment planned for any structural intervention or equipment purchasing on the one hand, and the economic savings deriving from the intervention on the other. So, in order to implement the Energy Saving Plans, each team will have at its disposal an initial virtual budget of 120.000 Monetary Units (MU). These can be allocated, for example, as follows: 30.000 MU for each one of the 3 schools, and the rest 10.000 MU for the interventions to be proposed for each one of the 3 houses.

Some **important aspects** as regards the work to be done in this phase are the following:

- ✓ Students will be supported in the preparation of their Plans by a predictive application included in the *EYEManager Championship software*, which will allow them to calculate the economic savings deriving from each one of the proposed interventions.
- ✓ The didactic planning for all the involved classes (in all 9 participating countries) will be organised in order to allow that, at least two hours every two weeks (obligatory), all the members of the teams will be able to meet in a virtual environment to carry out jointly the work (in order e.g. to propose, discuss and design the *Energy Saving Plans*). If it will be considered necessary, these "virtual meetings" could be more frequent (e.g. 2 hours once a week) but this is up to the International Team's "internal organisation", and with the agreement of the involved teachers.
- ✓ For the purpose of collective work, there is going to be made available to each of the teams a "private area" in the *EYEManager Championship software* and external tools for communication (see the document related to "EYEManager communication tools").
- ✓ In order to coordinate the work of the team, one **Leader School (LS)** for each team and for each one the two basic Phases of the EM work has to be appointed. The team members of the Leader School will be in charge of the work management, web-meetings coordination and the final designing of the Energy Saving Plans. The LSs of each Team and for each Phase (i.e. for schools and houses EM) are defined as follows:

	Team	Team	Team	Team	Team	Team
	1	2	3	4	5	6
1 st phase: School EM	IT	BG	PT	RO	SI	GR
2 nd phase: House EM	PL	ES	SI	SE	BG	PL

This means that, for example, for the Schools' EM (1st Phase), the LS for Team 4 will be the school from Romania, while for the same Team, the LS during the 2nd Phase (i.e. the Homes' EM) will be the Swedish one.

✓ During their work, the EYEManagers will be supported via the web by 12 **EYEManager Championship Tutors** (2 per Team, i.e. 1 per EM phase). The



Tutors will be the **teachers of the Leader Schools**, as defined above. If it will be considered necessary, the *Tutors* will be assisted in their tasks by an expert of the relevant LEA (upon request).

<u>Important Note</u>: The work on the *ES Plans* for schools is scheduled to take place between December 2009 and March 2010, while the one for the houses *ES Plans* is expected to last between February and May 2010.

2.5 Phase 5: EYEManager Championship Award Ceremony

This last phase of the Championship is directly related to the corresponding *Task 4.3: Organization of EYEManager Championship Awards* of WP4. It also fulfils the 3rd objective of TEG4. as regards the winner, the **rule** is:

✓ The international team that will obtain the major economic savings to the
implementation of the 6 Energy Saving Plans proposed by it, i.e. the team that
will have the most "rich" Energy Wallet at the end of the competition, will be
awarded as the Best European Young Energy Managers' Team.

The **EYEManager Championship Award Ceremony**, which according to the work-programme has to be organised at the end of the project (in Month 30, i.e. **February 2011**), will be once again held as an "International Campus". In this event, 9 students (the 9 which didn't participate in the first event) for each involved class will participate for a total of 81 students, plus 9 more youngsters belonging to the class with the same nationality of the location of the meeting, which in this case is **Italy** (Perugia):

Type of the event	Location	IT	SE	ES	GR	PT	SI	PL	RO	BG	Total
EYEManager Award	IT	10	0	0	0	0	0	0	0	0	90
Ceremony	(Italy)	10	9	9	9	9	9	9	9	9	90

The event will be organized in two sessions:

- 1. *Energy Saving Plans presentation*: Each one of the 6 international teams will choose one of the Energy Saving Plans developed to present it to the public.
- 2. Awarding of the EYEManager Champion Team: Small commemorative gifts (e.g. medals or plaques) will be given to the members of the winning international team (for this purpose a sponsor could be searched for), while some specially designed certificates will be issued to the rest of the participants in the Championship.