

The 4-Member Amazing Team for Project TOGETHER

We are **Leonardo, Marco, Alessia and Edoardo**.

We are seniors at Liceo Scientifico of the Giorgione High School of Castelfranco Veneto in the province of Treviso, and in a few months we will take our final high school graduation state exam.

Our school is one of the 100 institutions whose energy consumption is being managed by the Province of Treviso, in a seemingly pioneering fashion in Italy and, perhaps, at the European level.

Indeed, the Province has fitted school buildings with devices called “**smart meters**”, which collect electricity and heat consumption data in real time, displaying them on a web system called “**energysentinel**”.

Essentially, at any time of the day it is possible to **check the status of real consumption of a specific building**; potentially, it would be possible to detect the consumption of individual classrooms or even single parts of a building, if additional sensors are added to the general system.

We learned almost a year ago about the automated consumption measurement system and the institutional purview of the provincial authority in the management of school buildings, when our professors discussed with us the opportunity to cooperate with the provincial body and, specifically, the Building Construction Sector in the context of **School-to-Work programs in the framework of the project TOGETHER**.

In Italy, School-to-Work programs were introduced in 2015, and are compulsory for all students attending the last three years of high school. Before the program kicked off, we barely knew that the Provincial Body was in charge of managing, heating, supplying electricity and maintaining our school as well as all other provincial school buildings, including all associated gyms.

In short, we were not aware that in addition to its institutional “duty” to manage energy supply, the Province of Treviso introduced experimentally a few years ago, and in a more structured way since 2012, innovative systems for the management of energy demands, which was recognized as good practice also at European level.

In particular, the Province participates in the **European Network of Living Labs (ENOLL)**, at which, in 2014, it submitted the **Greenschools** initiative. It is basically a path undertaken in 1999 which entailed a new approach in the management of the educational heritage of secondary schools, with the aim of honing deep knowledge of the local assets, and involve users in the management and accountability in the use of common assets and space sharing. Greenschools aims in essence to transform schools into real incubators for the development of a new outlook oriented towards sustainability and energy savings.

In this period, just less than a year ago, we met Antonio and Marina at the Sant’ Artemio office.

Antonio is the Manager of the Buildings Estate and Public Tenders Department, and Marina is the Sector’s Engineer and Technical Officer, who, since 2016, has also been committed to the European project **TOGETHER: Towards a Goal of Efficiency Through Energy Reduction**, funded under the Interreg CENTRAL EUROPE 2014-2020 program, which aims to improve the ability of Public Administrations to

work towards achieving energy efficiency in buildings. The project was approved in 2016, has a duration of 36 months and a budget of 2,330,175.75 Euro, co-financed by the European Regional Development Fund.

At the sound of the word **TOGETHER**, we realized that, perhaps, unlike other **School-to-Work experiences**, we would do more than just make copies all day.

We immediately realized that our work would contribute to a puzzle of complex activities that in their entirety aim to provide the Administrations of 8 Central European countries with solutions to increase their ability to manage, if not reduce, energy demand.

Antonio and Marina manage the Project **TOGETHER** in cooperation with the European Relations office (mainly with Federica), with which they assist, support and guide not only the local network of 10 municipal authorities and 18 schools, for a total of 20 public buildings, but also the network of international partners that all together are experimenting with initiatives in **85 public buildings**. **Our school is one of them!**

There was no opportunity to participate in the **kick-off meeting of the project organized in Treviso** in June 2016, the date of its official start, and, therefore, to meet the staff of partners assigned to the project. The project representatives meet approximately every 6 months to take stock of the situation and plan activities, tackling together any problems and looking for solutions.

Of course, physical meetings are a moment to circle back on activities carried out across the miles, marked by a busy and daily exchange of emails, phone and Skype calls.

We learned about the regions involved - our famous partners - not only through the stories and anecdotes of Federica, the Financial Manager of the project for the European Relation Unit, but also through updates posted by partners on the FB page dedicated to the project, which, of course, we tagged with our own "likes". *(it is a particularly active page that, within the typical social network approach, presents the project's technical contents and can be accessed by everybody from the project Internet site)*

In short, it is a **transnational work group** that, within all work sites involved, operates together synergistically for the implementation of energy efficiency measures for public buildings.

Managing and being part of these projects certainly requires a set of **interdisciplinary skills**: technical or specific abilities in the project subject, as well as linguistic, organizational, financial, administrative, management and communication proficiency. It is necessary to have a perceptive capacity for mediation, identification and cooperation among the parties.

In our opinion, it also takes an **additional ingredient**, a secret ingredient ... **passion for what you do!**

After meeting this passionate team, we have ourselves become passionate about the subject matter, a contagious effect that we did not foresee at the beginning!

So much so that somebody among us four (Leonardo!) has serious doubts about what major to declare

after graduation. The experience in the Project TOGETHER has questioned his previously unquestionable choice to enrol in the School of Medicine...

Back to our experience Antonio and Marina have proposed to process with our School-to-Work project some calculation tools to identify in a scientific and mathematical way the share of electric consumption resulting from the **incorrect behaviour of users of our institute**.

After several briefings, including some conducted over Skype, we identified the workflow and started to assemble spreadsheets that allowed us stating with some accuracy that the potential for energy savings in our school is at 26%, which can be achieved through behavioural changes.

By quick accounting, we are talking about 100 Euro a week that in a year turn into about 4,000.00 Euro wasted for unnecessary energy. And these data apply only to our school! Imagine what would happen if the model is applied to all other schools. **And even if the amount was smaller why waste economic resources that could be used in another way ... to say nothing of the environmental impact in terms of CO2 produced.**

We were incredibly surprised by data we collected, aware through our simulations and estimates that it is possible to free up economic resources with behavioural changes that often require just a click: **turn off a computer and PC monitor, use natural light when possible, organize and rationalize the use of space, clarify who does what and do not let hallways, for instance, become no-man's land.** It often happens that the correct energy-saving practice is not implemented, and transformed into habit and consumption practice, in the uncertainty of who should do what or when it may not be possible to implement a certain behaviour, such as turning off hallway lights.

Our work has been made available locally to the other 7 high schools involved in the project, not only through the transfer of documentation and files, but also through a presentation of all work carried out, last September 25, 2017, in the auditorium of the Da Vinci High School in Treviso.

We explained to attendees, including high school administrators and professors (from desks to chairs!) our work processes, different phases and results obtained, as well as the strategies we suggested to improve behavioural performance.

Furthermore, **our work has also crossed national boundaries**, as it was translated and transmitted to the Points of Contact of the network of international partners, **so that they can take inspiration from our work, adapting it to their needs.** Our work was presented on occasion of the Hungarian partner's (Hegyvidek) **study visit** organised in Treviso, last January, with the participation of its thematic expert: a professor of Technology from the University of Budapest.

Truth be told, this is one of the values distinguishing local cooperation projects, namely, putting together knowledge, filtering it and eventually adopting winning solutions elsewhere.

And there is more, we were invited to participate as speakers at the thematic workshop **"Leveraging Behavioural change for Energy Efficiency in Public Building"** organized as part of the annual event of the European Living Lab Network, held last August in Krakow. This workshop was inspired by the

TOGETHER project and therefore organised by the Province of Treviso in close cooperation with other ENOLL members.

Participation in the ENOLL event not as simple participants but as speakers, alongside innovators, idea incubators, university professors, sociologists, economy experts and behavioural scientists is certainly the strongest experience within the framework of the School-to-Work project under the **TOGETHER brand**.

At that time, we actually met Patrycja Plonka, project manager for the Polish partner PNEC.

In the context of our own workshop, Patrycja presented some of the experiences that inspired the Project TOGETHER, in particular, the Project Euronet 50/50 MAX.

We returned from Krakow with loads of positive energy to meet the challenges inherent in the work of our senior year!

We have almost forgot to mention that we meet last summer **2 School advisors from California** interested in getting an insight into the project TOGETHER.

Our work at school is continuing not only on books, but also in our role as **environmental motivators** and, sometimes, the proverbial “**pain in the neck**”, because, unfortunately, that is how those who point out behaviours different from those that generally result from habits, if not laziness, are dubbed.

In our small way, **we try to stimulate changes, explaining to our teammates the work we did and data we collected, knowing that all building users, like teachers, caretakers, and administrative staff must work together to achieve concrete and lasting results.**

And last but not least **our parents are especially happy with the project in which we have been involved** ... it is no longer up to them to remind us to turn lights off; it is now us who unplug the phone charger as soon as charging is complete!

We are trying to convince them to retrofit our homes with consumption monitoring systems, similar to those that, thanks to Project TOGETHER, **have been installed in a total of 83 public buildings belonging to the project partners** , of course, with significantly lower costs that pay off through savings obtained.

With a simple APP, you can check energy consumption in your home and identify the unnecessary consumption of devices which can contribute to reducing energy costs!

One more thing... **Antonio, of course, has already installed a similar device in his home to keep under control his domestic consumption!**

