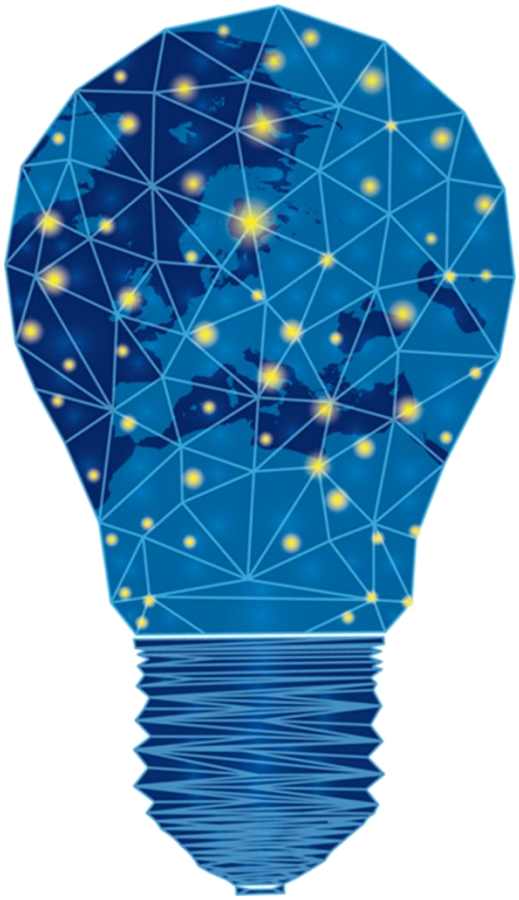
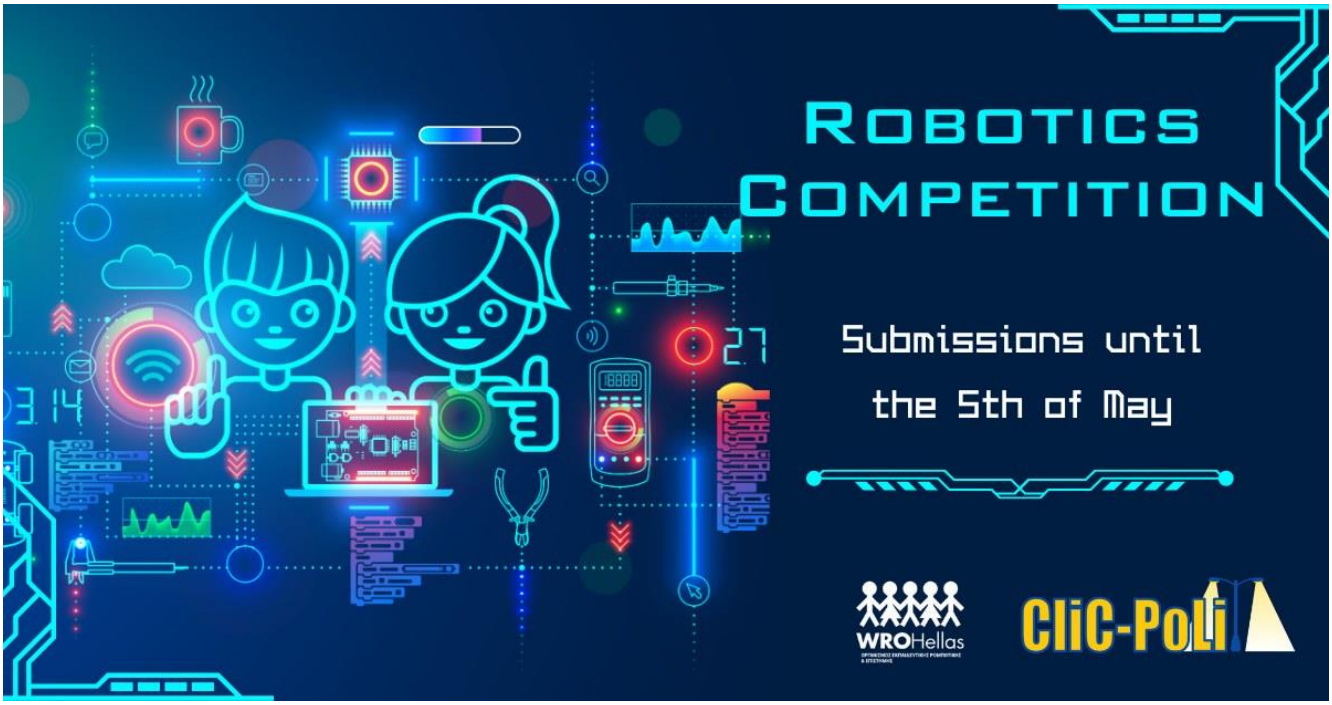



ROBOTICS
COMPETITION
Submissions until
the 5th of May
WROHellas
CliC-PoLi

Co-funded by the European Union

2nd Robotics Competition 2024

PROJECT TITLE: Climate Action and Light Pollution Threat
ACRONYM: CliC-PoliT
PROJECT WEBSITE: https://www.clicpolit.eu/
PROJECT NO.: 2021-1-IE01-KA220-SCH-000027825
PROJECT COORDINATOR: MTU
Blackrock Castle Observatory, Cork, Ireland
Project Partners

JUNE 4

WRO Hellas
Authored by: Aris Louvris

2nd Robotics Competition 2024

Open Junior High School Category

The 2nd Robotics Competition was organized for the Upper Primary and Secondary Schools on 30th of March 2024, in Athens that allowed students and teachers to engage with CliC-PoLiT and show deep learning in an interesting and exciting challenge: Light Pollution mitigation. The second Robotics Competition, as a didactic tool, "worked" as an interdisciplinary teaching and learning environment that promotes the development of scientific technological skills and competencies to construct, programme and manipulate robotic platforms. In advance, supporting material, tutorials and guidelines were prepared to enhance students' programming and engineering skills. Both phases of the challenge were open to schools from the countries represented in this partnership along with pilot school from Bulgaria.

WRO Hellas held the 2nd Robotics Competition of the project, along with a live streaming online event at 14th of May 2024

All participants' videos (both years) can be found at ClicPolit YouTube list of WRO Hellas channel.

The 2nd Robotics competition of the project took place in Athens, on March 30th 2023, in person for Greek teams, and in May 14th 2024, remotely for Portuguese teams, as well. Each group consisted of 2-4 students.

Before this, a webinar and a multiplier event took place between November and December 2023 (https://youtu.be/oVKbq1elHnc?si=IsAMWE7wcEkwDiO- in Greek language). The person in charge of the category informed the teachers - coaches for both the theoretical and the practical aspects of the phenomenon (the 1st one by examples with Microbit and the second more advanced with Arduino) and how they could transform the students' ideas into a project. The teams that participated in this category of the Competition received a certificate of participation in the EU program "CLiC-PoLiT". Fourteen (14) teams showed up in person, in Athens and the winners along with schools from Portugal (11 in total) more remotely, participated in the online event of May 14th 2024
https://www.youtube.com/live/GKZohmpSKRQ?si=dER7PXvcAeKmB8f3

Σεμινάριο
Φωτορύπανση
Περιορισμένες Θέσεις με ελεύθερη συμμετοχή
19
Δεκεμβρίου
2023
15:00
Λεωφ. Μεσογείων 446
Αγία Παρασκευή
Θα δοθεί micro:bit v2 starter:kit
WRO
HELLAS
CliC-PoLi
Co-funded by the European Union

As mentioned above, a multiplier event with 20 teachers (in 2 groups) took place in Athens. The multiplier event to tackle the phenomenon of light pollution, within the European Clic Polit program, was successfully held on Tuesday, December 19, 2023, in Agia Paraskevi.

At the multiplier event within the Clic Polit program, the participating teachers were informed about ways to deal with the phenomenon of light pollution, using tools such as the micro:bit processor and external sensors.
The use of these tools was done through hands-on activities, which aimed to measure and highlight the phenomenon of Light Pollution, as well as the parameters on which they depend. Thus, the participants had the opportunity to find various solutions and innovative approaches, through educational material based on modern technologies, being now ready to transmit this knowledge to their students.

More information and pictures are available at the page in Greek language:
Με επιτυχία πραγματοποιήθηκε το multiplier event για την αντιμετώπιση του φαινομένου της φωτορύπανσης - WRO HELLAS
Social media dissemination: WRO Hellas - Με επιτυχία πραγματοποιήθηκε το multiplier #event για... | Facebook & reel at Facebook

Below, in the table, you can see the participated teams of the category in Athens:

Όνομα Ομάδας	Σχολείο που εκπροσωπεί η Ομάδα	Περιφέρεια Ομάδας
Light Pollution-Micro:bit	**1ο Γυμνάσιο Τούμπας**	**Κεντρικής Μακεδονίας**
ROBOLUTION	**3ο Γυμνάσιο Γαλατσίου**	**Αττικής**
Light Pollution-Arduino	**1ο Γυμνάσιο Τούμπας**	**Κεντρικής Μακεδονίας**
Ασιμο ΙΙ	**Δρακος**	**Αττικής**
Β4	**46ο Γυμνάσιο Αθήνας**	**Αττικής**
LightGuards Innovators	**Stem Education Ξάνθης**	**Ανατολικής Μακεδονίας και Θράκης**
ΞΑΝΘΑΚΗΣ ΠΗΝΕΙΟ	**Σύμπραξη Σχολείων**	**Κρήτης**
ΞΑΝΘΑΚΗΣ ΑΝΤΙΣΤΑΣΗ	**Σύμπραξη Σχολείων**	**Κρήτης**
LuminaGuardians	**Ζάννειο Πρότυπο Γυμνάσιο Πειραιά**	**Αττικής**
Light Polution Solution	**Φροντιστήριο ΜΕΤΑ ΜΟΡΦΩΣΕΩΣ**	**Αττικής**

7ο Γυμνάσιο Ρόδου	7ο Γυμνάσιο Ρόδου	Ν.Αιγαίου(Δωδεκανήσων)
Stem12	12ο Γυμνάσιο Ηρακλείου	Κρήτης
Οι προστάτες	Γυμνάσιο Καλυθιών	Ν.Αιγαίου(Δωδεκανήσων)
ΓΚΑΝΞΤΕΡΑΚΙΑ	Γυμνάσιο Καλυθιών	Ν.Αιγαίου(Δωδεκανήσων)

This resulted in the formation of the 4 best teams to participate in the online event of May, due to the following grading of the criteria as described in **The Robotics II 2023-24 competition context and guidelines published** here:

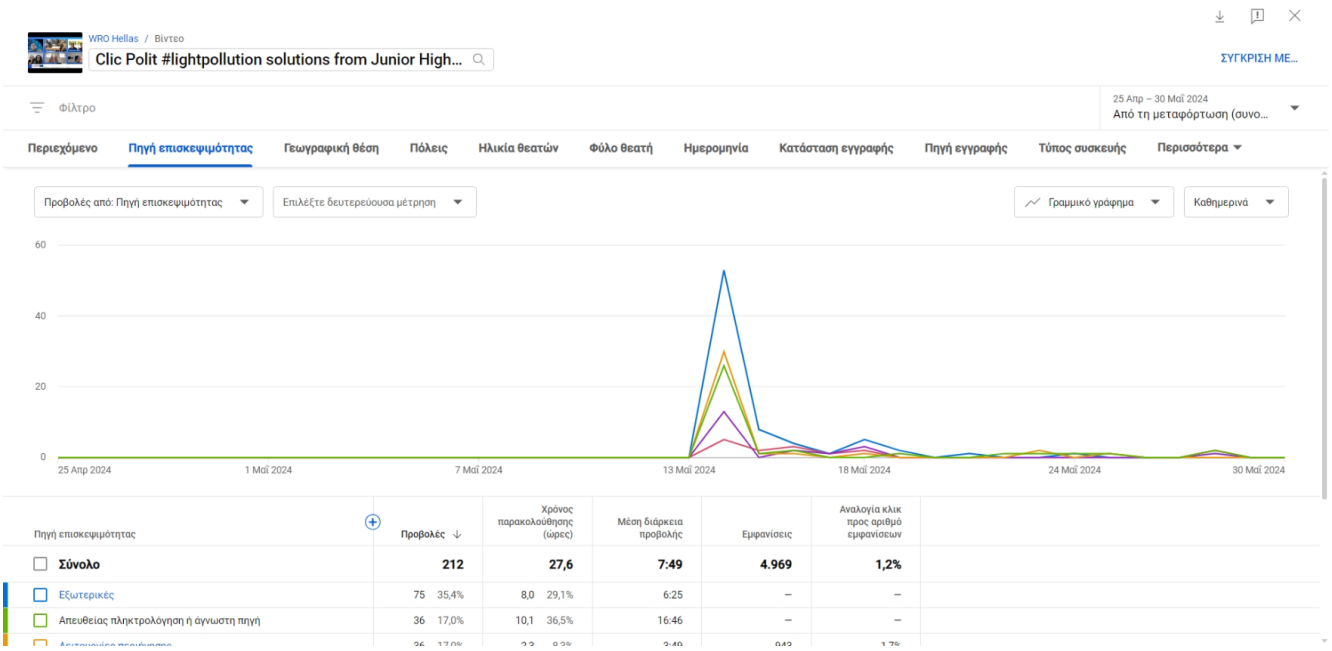
Κατηγορία	Κριτήριο		Ομάδα			
			Robolution	LightGuards Innovators	STEM Τούμπας	Light Pollution Solution
Έργο και Καινοτομία (70)	Ιδέα, Ποιότητα και Δημιουργικότητα (30)		30	20	15	10
	Έρευνα και Αναφορά (15)		10	10	10	5
	Χρησιμότητα της Ιδέας (15)		15	10	5	5
	Καινοτομία και Σλόγκαν (10)		10	5	5	5
Ρομποτική Λύση (65)	Ρομποτική Λύση (30)		10	25	15	10
	Ουσιαστική χρήση εννοιών μηχανικής (10)		5	5	5	5
	Αποδοτικότητα κώδικα & αυτοματοποίηση λογισμικού (10)		10	10	8	5
	Παρουσίαση Ρομποτικής Λύσης (15)		10	5	10	12
Παρουσίαση & Ομαδικό Πνεύμα (65)	Παρουσίαση & παρουσία (30)		20	20	15	15
	Τεχνική κατανόηση και γρήγορη σκέψη (15)		10	10	15	10
	Ομαδικό πνεύμα (20)		10	15	15	15
		ΣΥΝΟΛΟ	**140**	**135**	**118**	**97**

Therefore, it all concluded to the online event that took place on 14th of May, 2024
In order to participate teams from other countries had to sign up your team and create their own robotic solution for the problem of light pollution!
The submission deadline was May 5th, 2024 and we ended up to the following teams:

Team Name	Country
Micro-lumens	Portugal
Galaxy lights	Portugal
Cascais Future	Portugal
The Illuminated	Portugal
Less light	Portugal
Let's get a better world	Portugal
Light Changers	Portugal
ROBOLUTION	Greece
STEM Toumba	Greece
LightGuards Innovators	Greece
Light Polution Solution	Greece

The live broadcast is the following and can be seen by teams separated:
01:54 Frances Mc Carthy Project Coordinator - Blackrock Castle Observatory Ireland
06:10 Robolution (Vicky Pagiali) 3rd Junior High School of Galatsi, Athens Greece 19:50 LightGuards Innovators (Nikos Fesakis) STEM Education Xanthi GR
34:00 Os Iluminados (The Illuminated - Maria do Rosário Tavares) Agrupamento de Escolas De Cascais, 1st team Portugal
42:55 Save Energy (Dimitris Nastoulas) 1st Junior High School of Toumba, Thessaloniki Greece
53:40 Light Polution Solution (Diana Sioumi) A group of schools from Athens, Greece
01:08:04 Galaxy lights (Luciana Almeida) Escola Secumdária José Saramago, Portugal
1:16:20 Menos Luz (Less light - Maria do Rosário Tavares) Agrupamento de Escolas De Cascais, 2nd team Portugal
1:20:44 Micro-lumens (Marilia Peres) 2nd team from Escola Secumdária José Saramago, Portugal
1:40:55 Cascais Future (Sandra Bernardo) Agrupamento de Escolas De Cascais, Portugal

1:49:45 Vamos lá conseguir um mundo melhor! (Let´s get a better world Maria do Rosário Tavares) 3rd team from Agrupamento de Escolas De Cascais, Portugal 1:56:57 Light Changers (Maria do Rosário Tavares) 4th team from Agrupamento de Escolas De Cascais, Portugal
2:02:12 Aris Louvris Live Coordinator for WRO Hellas along with our mentors Dr. George Souvatzoglou and Konstantinos Bezaitis.
Below you can see the stats as taken on 31st of May 2024. As you can notice, the date it was broadcasted, you can see 4.969 shows.



Supplementary to all these, we had the public school PPMG "Akad. Ivan Tsenov"- from Vratsa, Bulgaria involved in the online event of the Erasmus Clic-Polit Project.

As a result of the implemented activities - introduction of micro:bit and Nezha robotics kit – the 50 students were able to develop their own light pollution-based environmental solutions and give a presentation of their outcomes.

This is an added value which covers the topic we are currently working on under Erasmus in our international partnership.