



Project number:
KA220-SCH-A710136B

**Climate Action
and
Light Pollution Threat**



**Designing an
educational activity for your class:
the CliC - Poli
templates & approach**

Dr. Loukas Katikas
Ellinogermaniki Agogi
July 11, Marathon, Greece

This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project No.KA220-SCH-A710136B



Co-funded by the
Erasmus+ Programme
of the European Union



Template outline

- ▶ Title & Duration
- ▶ Target group (grade), Description & Learning objectives
- ▶ Ideas to support school & out of school activities
- ▶ Green Competences Linked
- ▶ Educational approach & Links to school curricula
- ▶ Equipment, materials & tools
- ▶ Tasks & Timeline

Template metadata



CliC – PoLiT Lesson Plan template

Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity)	
Topic title (i.e. Monitoring impact on urban species)	
Lesson Plan title (i.e. Green parks hunters)	
Duration	<i>i.e. 45 minutes or 2 school hours (45 + 45 minutes)</i>
Short Description of the Lesson	<i>Students will learn about...</i>
Learning Goals	<i>This activity will help students to: i, ii, iii, v,</i>
Green Competences Linked	<i>Linkages to the <u>Green Comp. Framework</u></i>
Target Group	<i>9 – 12 or 12 – 15 years old (3 – 9 grades)</i>
Educational Approach	<i>i.e. Inquiry – based, Project – based, Experiential learning etc.</i>
Link to School Curricula	<i>i.e. Science, Math, Environment, Geography</i>
Facility/ Equipment & Tools/ Materials	<i>i.e. Classroom, internet access, printables, presentation</i>
Main Tasks	

Template metadata (2)



Different topics per module covering all aspects of Light Pollution.

Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity)	
Topic title (i.e. Monitoring impact on urban species)	
Lesson Plan title (i.e. Green parks hunters)	
Duration	<i>i.e. 45 minutes or 2 school hours (45 + 45 minutes)</i>
Short Description of the Lesson	<i>Students will learn about...</i>
Learning Goals	<i>This activity will help students to: i, ii, iii, v,</i>
Green Competences Linked	<i>Linkages to the Green Comp. Framework</i>
Target Group	<i>9 – 12 or 12 – 15 years old (3 – 9 grades)</i>
Educational Approach	<i>i.e. Inquiry – based, Project – based, Experiential learning etc.</i>
Link to School Curricula	<i>i.e. Science, Math, Environment, Geography</i>
Facility/ Equipment & Tools/ Materials	<i>i.e. Classroom, internet access, printables, presentation</i>
Main Tasks	

Template metadata (3)



Simple to complex activities, experiments, inside and outside of school activities.

Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity)	
Topic title (i.e. Monitoring impact on urban species)	
Lesson Plan title (i.e. Green parks hunters)	
Duration	<i>i.e. 45 minutes or 2 school hours (45 + 45 minutes)</i>
Short Description of the Lesson	<i>Students will learn about...</i>
Learning Goals	<i>This activity will help students to: i, ii, iii, v,</i>
Green Competences Linked	<i>Linkages to the Green Comp. Framework</i>
Target Group	<i>9 – 12 or 12 – 15 years old (3 – 9 grades)</i>
Educational Approach	<i>i.e. Inquiry – based, Project – based, Experiential learning etc.</i>
Link to School Curricula	<i>i.e. Science, Math, Environment, Geography</i>
Facility/ Equipment & Tools/ Materials	<i>i.e. Classroom, internet access, printables, presentation</i>
Main Tasks	

Template metadata (3)



Competence-based activities related to the green & sustainability skills per age group.

Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity)	
Topic title (i.e. Monitoring impact on urban species)	
Lesson Plan title (i.e. Green parks hunters)	
Duration	<i>i.e. 45 minutes or 2 school hours (45 + 45 minutes)</i>
Short Description of the Lesson	<i>Students will learn about...</i>
Learning Goals	<i>This activity will help students to: i, ii, iii, v,</i>
Green Competences Linked	Linkages to the <u>Green Comp. Framework</u>
Target Group	9 – 12 or 12 – 15 years old (3 – 9 grades)
Educational Approach	<i>i.e. Inquiry – based, Project – based, Experiential learning etc.</i>
Link to School Curricula	<i>i.e. Science, Math, Environment, Geography</i>
Facility/ Equipment & Tools/ Materials	<i>i.e. Classroom, internet access, printables, presentation</i>
Main Tasks	

GreenComp



GreenComp: The European sustainability competence framework by JRC

12 competences organised into the four areas below:

- **Embodying sustainability values, including the competences**
 - valuing sustainability
 - supporting fairness
 - promoting nature
- **Embracing complexity in sustainability, including the competences**
 - systems thinking
 - critical thinking
 - problem framing
- **Envisioning sustainable futures, including the competences**
 - futures literacy
 - adaptability
 - exploratory thinking
- **Acting for sustainability, including the competences**
 - political agency
 - collective action
 - individual initiative



Template metadata (4)



Educational approaches to be used, STEAM activities, materials and equipment needed

Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity)	
Topic title (i.e. Monitoring impact on urban species)	
Lesson Plan title (i.e. Green parks hunters)	
Duration	<i>i.e. 45 minutes or 2 school hours (45 + 45 minutes)</i>
Short Description of the Lesson	<i>Students will learn about...</i>
Learning Goals	<i>This activity will help students to: i, ii, iii, v,</i>
Green Competences Linked	<i>Linkages to the <u>Green Comp. Framework</u></i>
Target Group	<i>9 – 12 or 12 – 15 years old (3 – 9 grades)</i>
Educational Approach	<i>i.e. Inquiry – based, Project – based, Experiential learning etc.</i>
Link to School Curricula	<i>i.e. Science, Math, Environment, Geography</i>
Facility/ Equipment & Tools/ Materials	<i>i.e. Classroom, internet access, printables, presentation</i>
Main Tasks	

Template metadata (5)



Educational approaches to be used, STEAM activities, materials and equipment needed

Module title (i.e. Light Pollution & Energy Efficiency or Light Pollution & Biodiversity)

Topic title (i.e. Monitoring impact on urban species)

Main Tasks

10 minutes

Task 1: Introduction to light pollution



1.1 Start the lesson with the following video

15 minutes

Task 2: Understanding light pollution



2.1 Provide your students with sticky-notes and ask them to provide answers

10 minutes

Task 3: Light pollution monitoring and mapping



3.1 Using online tools to identify light pollution from space

25 minutes

Task 4: Discuss with the students



4.1 Create a poster presenting the light pollution levels in...



Thank you!

This Photo by Unknown Author is licensed under [CC BY-SA](#)



This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project No.KA220-SCH-A710136B



Co-funded by the
Erasmus+ Programme
of the European Union