

# European SWOT Analysis on Education for Environmental Citizenship



*Edited by*  
Andreas Ch. Hadjichambis, Pedro Reis & Demetra Paraskeva-Hadjichambi

 **cost**  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY

 Funded by the Horizon 2020 Framework Programme  
of the European Union

**U ie**  
LISBOA  
UNIVERSIDADE  
DE LISBOA  
**Instituto de  
Educação**



European Network for  
Environmental Citizenship  
Cost Action CA16229





ENEC Cost Action Report

# **European SWOT Analysis on Education for Environmental Citizenship**

*Edited by*

**Andreas Ch. Hadjichambis<sup>1,2</sup>, Pedro Reis<sup>3</sup>, Demetra  
Paraskeva-Hadjichambi<sup>1,2</sup>**

1: Cyprus Centre for Environmental Research and Education, CYCERE,  
Agiou Andreou 306, P.O. Box 56091, 3304 - Cyprus University of Tech-  
nology, Lemesos, Cyprus, e-mail: a.chadjihambi@cytanet.com.cy

2: Cyprus Ministry of Education and Culture, Kimonos & Thoukididou,  
1434, Nicosia, Cyprus, e-mail: demhad@ucy.ac.cy

3: Instituto de Educação – Universidade de Lisboa, Alameda da Univer-  
sidade, Lisboa, Portugal, e-mail: preis@ie.ulisboa.pt

**ISBN: 978-9963-9275-6-2**

***Reference***

This book is referenced as below:

Hadjichambis, A. Ch., Reis, P. & Paraskeva-Hadjichambi D. (Eds.). (2019). *European SWOT Analysis on Education for Environmental Citizenship*. Lisbon: Intitute of Education – University of Lisbon, Cyprus Centre for Environmental Research and Education & European Network for Environmental Citizenship – ENEC Cost Action.

***Address***

Cost Association Address: Avenue Louise 149, 1050 Brussels, Belgium  
Postal Address: Cyprus Centre for Environmental Research and Education  
– CYCERE, Agiou Andreou 306, P.O. Box 56091, 3304, Lemesos, Cyprus.

This Report is free of charge.

## Acknowledgements

This report is based on work from Cost Action ENEC – European Network for Environmental Citizenship (CA16229) supported by COST (European Cooperation in Science and Technology).

COST (European Cooperation in Science and Technology) is a pan-European Intergovernmental Framework. Its mission is to enable break-through scientific and technological developments leading to new concepts and products and thereby contribute to strengthening Europe’s research and innovation capacities.



Funded by the Horizon 2020 Framework Programme of the European Union



**European Network for  
Environmental Citizenship**  
Cost Action CA16229

Grant Holder Institution:





## Table of Contents

	page
<b>PART I: European Synthesis of SWOT Analysis</b>	1
<b>Chapter 1: European Synthesis of SWOT Analysis for Education for Environmental Citizenship</b> Andreas Ch. Hadjichambis & Demetra Paraskeva-Hadjichambi	3
<b>PART II: European Countries' Reports</b>	23
<b>Chapter 2: Short Country Report AUSTRIA</b> Katharina Lapin & Florian Leregger	25
<b>Chapter 3: Country Report BOSNIA AND HERZEGOVINA</b> Mirjana Zabic & Gekic Haris	35
<b>Chapter 4: Education for Environmental Citizenship: An opportunity for Flanders BELGIUM? Results of the Flemish SWOT analysis for ENEC</b> Jelle Boeve-de Pauw	51
<b>Chapter 5: Short Country Report for BULGARIA on the SWOT Analysis of Education for Environmental Citizenship</b> Boris Manov & Dilyana Keranova	59
<b>Chapter 6: Education for Environmental Citizenship in CROATIA</b> Slaven Gasparovic & Ivan Sulc	73

<b>Chapter 7: Education for Environmental Citizenship in CYPRUS: A SWOT Analysis</b> Andreas Ch. Hadjichambis & Demetra Paraskeva-Hadjichambi	83
<b>Chapter 8: ENEC Country Report: DENMARK</b> Danielle Wilde, Bjørn Bedsted, Lucas Larsen & Susanne Dau	95
<b>Chapter 9: SWOT Analysis of Education for Environmental Citizenship – Country Report: GREECE</b> George Farangitakis & Themistoklis Sbarounis	111
<b>Chapter 10: SWOT Analysis of Education for Environmental Citizenship – Short HUNGARIAN report</b> Adrienne Csizmady, Imre Kovách & Boldizsár Megyesi	121
<b>Chapter 11: SWOT Analysis of Education for Environmental Citizenship – Short ISRAELI Report</b> Daphne Goldman	133
<b>Chapter 12: ITALY: Short Country Report</b> Daniela Conti & Luca Baglivo	145
<b>Chapter 13: SWOT Analysis of Environmental Citizenship Education in LITHUANIA</b> Mykolas S. Poskus, Audra Balunde & Lina Jovarauskaite	155

<b>Chapter 14: SWOT Analysis of Education for Environmental Citizenship – Short LATVIA Report</b> Maris Klavins	165
<b>Chapter 15: SWOT Analysis of Education for Environmental Citizenship – Short Report for THE NETHERLANDS</b> Frans van Dam & Marie-Christine Knippels	171
<b>Chapter 16: Education for Environmental Citizenship in NORWAY</b> Finn Arne Jørgensen, Lihong Huang & Eli Melby	181
<b>Chapter 17: Education for Environmental Citizenship in PORTUGAL – A SWOT Analysis</b> Pedro Reis	189
<b>Chapter 18: SWOT Analysis of Education for Environmental Citizenship in ROMANIA</b> Rareş Hălbac-Cotoară-Zamfir & Cristina Hălbac-Cotoară-Zamfir	201
<b>Chapter 19: Short Country Report SERBIA</b> Mirjana Lenhardt, Marija Smederevac-Lalić & Vesela Radović	207
<b>Chapter 20: SWOT Analysis of Education for Environmental Citizenship – Short Country Report SLOVAKIA</b> Vladislav Kaputa & Hubert Paluš	219

<b>Chapter 21:</b> SPANISH SWOT Analysis of Education for Environmental Citizenship Marta Romero Ariza	227
<b>Chapter 22:</b> SWOT Analysis of Education for Environmental Citizenship – Short SWEDISH Report Per Sund & Niklas Gericke	245
<b>Chapter 23:</b> Short Country Report Switzerland ENEC COST Action CA16229 Country Report SWITZERLAND Ralph Hansmann, Jérôme Duberry & Nicole Bauer	249
<b>Chapter 24:</b> Short Country Report UNITED KINGDOM Andri Christodoulou & Ralph Levinson	267

## **List of Main Abbreviations**

CE: Citizenship Education  
CoP: Community of Practise  
DSP: Dominant Social Paradigm  
EA: Environmental Attitudes  
EB: Environmental Behaviour  
EC: Environmental Citizenship  
ECn: Environmental Citizen  
EE: Environmental Education  
EEC: Education for Environmental Citizenship  
EfS: Education for Sustainability  
ESD: Education for Sustainable Development  
FCN: Frequency of Contact with Nature  
NC: National Curriculum  
NEP: New Environmental Paradigm Scale  
PSAs: Public Service Announcements  
SE: Science Education  
SSIBL: Socio-Scientific Inquiry-Based Learning  
STEM: Science Technology Engineering & Mathematics  
TPB: Theory of Planned Behaviour  
TPD: Teacher Professional Development  
VBN: Values Beliefs Norms



## Foreword

Environmental citizenship is crucial for the success of any environmental policy. Sustainable development, a circular economy, a low-carbon economy, and a bio-economy require an effective citizen engagement. Citizens are called upon to adopt environmental attitudes and behaviours, make green choices, increase civic participation, and to be aware of and apply their environmental rights and duties. The contemporary environmental crisis with climate change, biodiversity loss, air pollution and all other local and global environmental problems demand an education that is capable of empowering environmental citizens. Education plays a key role in shaping future environmental citizens; nobody is born environmental citizen but anybody can become so by education.

This report presents a SWOT Analysis of an integrated and holistic type of education in Europe “Education for Environmental Citizenship”. The SWOT analysis is presented in two levels. In Part A a synthesis of the results of 157 experts from 28 European countries are presented. In Part B the reader can explore the 23 European country reports.

It is important to clarify that this research regarding SWOT analysis was undertaken before any development on the concept of Education for Environmental Citizenship such as common definition and the pedagogical approach. In this fact it illustrates the experts’ opinion in the different contexts through out Europe.

We hope that European stakeholders will find it useful.

Dr Andreas Ch. Hadjichambis  
Prof Pedro Reis  
Dr Demetra Paraskeva-Hadjichambi

*European Network for  
Environmental Citizenship  
ENEC Cost Action CA16229*



## 20. SWOT Analysis of Education for Environmental Citizenship – Short Country Report Slovakia

Vladislav Kaputa & Hubert Paluš

Department of Marketing, Trade and World Forestry, Faculty of Wood Sciences and Technology, Technical University in Zvolen, T. G. Masaryka 24, 960 01 Zvolen, Slovakia, e-mail: kaputa@tuzvo.sk, palus@tuzvo.sk

**Abstract:** This report summarises the views of experts in the area of environmental education in Slovakia. It introduces the SWOT analysis of Education for Environmental Citizenship. Six participants representing teachers, researchers and professionals working in government and non-government decision-making bodies responded to the questionnaire. The important outcome of the survey are remarks of respondents about unclearness of the terms used in the questionnaire. In fact, the differences between all the proposed kinds of education (Citizenship Education (CE), Environmental Citizenship (EC), Environmental Education (EE), Education for Sustainable Development (ESD), Science Education (SE), and Education for Environmental Citizenship (EEC) are not recognised in Slovakia. From a formal and institutional point of view, one of the main disadvantages is the formal status and position of Education for Environmental Citizenship within the educational system in Slovakia. In Slovakia, just the EE is a part of the State Educational Program in terms of goals, performance and content standards of education of almost all compulsory subjects and it is one of the cross-cutting themes. It is also a part of the National Education Program for all levels of education and could be an individual learning subject in school education programmes. ‘Formality’ could be seen to be an unsolved issue because Education for Environmental Citizenship is often only performed formally. Education for Environmental Citizenship focuses mostly on schools without having a broader impact on the public. Here, school managers and teachers are not properly motivated to develop environmental issues. On the other hand, several experts mentioned that non-formal Education for Environmental Citizenship is more easily applied, as any adjustments in formal education requires appropriate adjustments to legislation, directives and regulations related to school system.

**Acknowledgments:** This chapter is based on work from Cost Action ENEC – European Network for Environmental Citizenship (CA16229) supported by COST (European Cooperation in Science and Technology). We would like to thank all experts who provided valuable input for this work and the support of the members and the chair of the COST action ‘European Network for Environmental Citizenship’ (ENEC).

## 20.1 Strengths of Education for Environmental Citizenship

First of all, it should be mentioned that there is no difference between the terms 'Education for Environmental Citizenship' and 'Environmental Education' (EE) in Slovakia. Though respondents may understand that these terms do not mean the same, some answers should not have to take this fact into account. One participant responded that Education for Environmental Citizenship could cover a wider group of people and therefore have better impact on the environment (in case of active citizens). It is understood that EE is mainly aimed at children and students, while Education for Environmental Citizenship could focus on a wider group of adults and decision-makers. EE is part of the National Education Program for all levels of education and it is a subject in the school education programmes. At the same time, it offers a variety of forms and methods in schools, depending on the interest of the school, the teachers, pupils, the school region, etc. There is also an opportunity to appoint an EE school coordinator.

Other advantages identified by the respondents include being able to receive significant help from other organisations, it is attractive to schools (because of external support), and it yields good practice examples (e.g. participation in the Eco-Schools programme, the project Eat Responsibly, Young Reporters for the Environment, etc.) Participating teachers are motivated, and such projects enable active environmental education by NGOs (education for teachers, cooperation with schools). EE is also part of the obligatory school curriculum. Children are able to behave environmentally and think realistically. It is important to ensure that there is a link between education and practice.

Respondents also pointed out the areas in which Education for Environmental Citizenship could perform better than other types of educations. Education for Environmental Citizenship could concentrate more on decision-makers at family level, company level and society level. It has the potential to better explain the responsibilities necessary for the future of the environment and inform on the practical measures that citizens can implement within a family/community/municipality. It can comprise small environmental community projects, volunteering, environmental activities such as games or competitions. Education for Environmental Citizenship could contribute to the development of education and teacher preparation at universities, improve environmental education and ecological awareness within municipalities, and become part of the school reform system.

There are also several unique features to Education for Environmental Citizenship. It can support citizens in their response to the current social and ecological problems in our globalised world. It is an inquiry-based science education that directly connects and involves citizens. We need active and educated municipalities that cooperate with schools, we need the support of school clerks, and money for the education of teachers and for the realisation of projects in the practice. There is a great deal of readily available information, we have good practices, we know how, but we need better conditions. Education for Environmental Citizenship should without a doubt be considered as a type of project-based education.

The strengths of Education for Environmental Citizenship are based on the principles of sustainability. The main benefits identified by the respondents include a strong linkage to the educational standards of many compulsory subjects, an ability to connect educational organisations with institutions from practice, the use of personal experiences and strong motivation, the use of a heuristic method and the assurance of a long-term memory of students.

## **20.2 Weaknesses of Education for Environmental Citizenship**

Respondents were asked to identify the weaknesses of Education for Environmental Citizenship. Considering its institutional and formal aspects there is a small number of accredited training programmes on the course as well as an absent undergraduate (future) teacher training resulting in the failure of teachers of different subjects to correctly implement the topic. Related to these is a weak motivation of school leaders and teachers, and the fact that the work of the environmental education coordinators is only performed at formal level, educational objectives are then met on this level only. There is a limited time scheduled for this kind of education, often the teaching is only theoretical and children do not believe that they can act environmentally. Moreover, it is believed that without the support from families, EE cannot be very effective. On a state administration level, there is insufficient self-government interest and too much political pressure towards municipalities. From the point of environmental NGOs (ENGOs) there are no sufficient official long-term financial resources available to develop this educational area (financing is tied to particular short-term projects).

Teachers and students see the main weaknesses of Education for Environmental Citizenship to be both the formal nature of this education and ineffectively applied measures, resulting in greenwashing. It is also time-consuming as many activities have to be organised after school for students as well as teachers. Some teachers see these activities as a burden. Unsuitable teaching methods appear to be a weakness.

Underlying factors behind these weaknesses are those linked to the unwillingness and apathy among teachers and students/citizens. Too much theory, information or school subjects (classes) relating to EE already exists. However, in reality the behaviour of society and, in particular, governments and politicians is changing very slowly in favour of the environment. Other factors include pressure from political parties and business corporations, weak self-confidence of students, social status of special communities (e. g. Roma/gypsy communities) and the low motivation of teachers.

To overcome these weakness, Education for Environmental Citizenship should not be aimed at explaining the basic ecological principles and the issues addressed by EE. Instead, it should focus on practical measures that citizens can apply in their everyday lives (as individuals or within the family/community/municipality). It should also avoid 'reporting' activities only formally (on paper) in order to meet the

planned task and concentrate on carrying out those activities in the practice. Improvements can be seen in the area of teachers' education towards Education for Environmental Citizenship, better implementation of Education for Environmental Citizenship in practice, increasing professional abilities and motivations of education coordinators.

### **20.3 Opportunities for Education for Environmental Citizenship**

There are several factors favouring the development of Education for Environmental Citizenship. Several of them relate to the legislative environment (e.g. the adaptation of legislation both governmental and EU) and include: supporting local producers of goods and services, and adapting regulations or measures to gradually reduce a consumer lifestyle (these measures should economically motivate people to adhere to the rules for reducing the consumption). The realisation of small environmental community projects, volunteering and environmental activities such as games or competitions can also be seen as opportunities. Another attractive prospect follows on from the fact that Education for Environmental Citizenship is based on the principles of sustainability – it could engage citizens to participate in project and activities in communities and help them move towards sustainability. Trained communities can inspire others to do similar things and therefore become aware of environmental issues. This can lead to an increased interest in studying environmental programmes, organising more voluntary activities and events as well as collecting and sharing new ideas to improve the environment.

There are also several trends that support these opportunities identified by the respondents. There are new technologies available for the production of clothing from renewable sources. Currently, plastics from recycled waste are used in the garment industry. However, the future will be products made from biomass (tencel, flax, bio cotton, cellulose and lignin). This new technology should also be supported by legislation in order to make biomass products economically beneficial. Another positive trend is that Education for Environmental Citizenship is considered to be an inquiry-based science education, incorporating interactive aspects, good practices and promoting cooperation between municipalities, schools and universities. Trends in consumer patterns (buying local food, minimalism, yard/garden sales, recycling, bio agriculture) are also in favour of the positive development of Education for Environmental Citizenship. At the same time the environmental legislation supports changes towards better conditions. Companies and their strategies and policies contribute to a better awareness of environmental education and environmental issues.

## **20.4 Threats for Education for Environmental Citizenship**

Main threats are linked to obstacles that can impede the positive development in this area. They may be related to the weak economic motivation of citizens to adhere to the sustainable development goals and principles, the indifference of people to engage in participatory governance or to the strong economic and lobbying position/impact of transnational companies in the oil/plastics industry. Education for Environmental Citizenship is still not recognised by the government as an educational priority. In order to achieve this, a complex school curriculum reform is needed and there is a need for more non-political city management. From a methodological point of view there might be an absence of concrete methods for Education for Environmental Citizenship activities or an insufficient number of volunteers to teach these issues. Other obstacles can be of a financial nature that relate either to the low amount of available resources or a weak motivation to promote recycling. Some problems may also reflect the fact that Education for Environmental Citizenship is often only performed formally, school leaders and teachers are not properly motivated, and Education for Environmental Citizenship focuses mainly on schools without having a broader impact on the public.

Changing technologies are also considered to be a threat. There is currently a general economic and technology trend to produce products with a shorter life span. This trend forces the population to frequent store exchanges and to buy new products, although this might not be necessary. These technological and economic practices of companies have a negative impact not only on environment but on Education for Environmental Citizenship as well.

In general, most of respondents see threats and obstacles similar to weaknesses.

## **20.5 Additional Aspects of Education for Environmental Citizenship**

Regarding the performance of Education for Environmental Citizenship in comparison to different types of education (EE, ESD, SE, ESD), it is difficult to define any substantial differences as, in Slovakia, there is little difference in terminology. Similarities between individual types of education are summarised in Table 20.1.

**Table 20.1 Similarities between individual types of education.**

SWOT question	mean	max	min
To what degree (1-5) is Education for Environmental Citizenship similar to Environmental Education (EE)?	3.8	5	2
To what degree (1-5) is Education for Environmental Citizenship similar to Education for Sustainable Development (ESD)?	3.8	5	3
To what degree (1-5) is Education for Environmental Citizenship similar to Science Education (SE)?	3.3	4	3
In what degree (1-5) is Education for Environmental Citizenship similar to Citizenship Education (CE)?	3.5	5	2

n=6

Respondents agreed that there is a general lack of study materials in the field of Education for Environmental Citizenship and materials in the Slovak language in particular. Existing materials are only translated from foreign languages and therefore do not necessarily reflect the specific country situation. On the other hand, there is a lot of good materials for EE and sometimes it is hard to choose the right one. When deciding on a particular material a critical judgment has to be applied. There are also different applications available and several ENGOs have published working sheets, short videos and organised different workshops. There are different forms and methods such as projects, seminars, teaching blocks, courses, excursions, exercises, creative workshops, different programmes and competitions.

Most of the respondents did not see differences between formal and non-formal education regarding the Strengths, Opportunities, Weaknesses and Threats of Education for Environmental Citizenship. However, some did point out that non-formal learning provides better experiences, contacts, materials, collaboration and communications and have a better impact on participants. Non-formal Education for Environmental Citizenship is much easier to apply and any adjustments in formal education require appropriate changes to the legislation, directives and regulations that relate to the school system.

There is stronger motivation and more time for different activities in primary education compared to secondary, as in secondary education such activities are only offered on a voluntary basis. There are also more projects available for primary education. However, even if primary education is quite good, the problem stands with the transfer of knowledges and skills from schools to households. Secondary school education is more engaged in volunteering. Age is a limiting factor for participating in environmental activities. Older children are enthusiastic to be different and they like to behave more like adults, so they feel they can really make a difference. However, in both degrees of education it depends on the teachers and their motivation to perform well.

## 20.6 References

Answers from the stakeholders:

- Standardized questionnaire – from 3 experts, January-February 2018
- Personal standardized interviews with 3 experts, carried out in January-February 2018



The European Network for Environmental Citizenship (ENEC) – funded as a COST Action (CA16229-Horizon 2020) – brings together more than 120 experts from 37 countries with the objective to improve the understanding, the practice and the assessment of Environmental Citizenship in Europe and the participating countries.

Environmental Citizenship has been an influential concept in many different arenas such as economy, policy, philosophy, organizational and corporation management and marketing and could be better exploited and established furthermore in the field of education as well.

This report examines the Strengths, Weaknesses, Opportunities and Threats of Education for Environmental Citizenship in Europe. In the first part of the report, the need for Education for Environmental Citizenship, is examined along with the methodology and results of an extensive research from more than 157 experts in 28 European countries and Israel. In the second part of the report, the country chapters for the 23 European countries and Israel emphasise the similarities, differences and special features of these case studies.

**ISBN: 978-9963-9275-6-2**



Funded by the Horizon 2020 Framework Programme of the European Union



European Network for  
Environmental Citizenship  
Cost Action CA16229

