



Study about Green Jobs and Education in Hungary

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Europäisches Bildungskonzept im Umwelt-, Natur-, und Klimaschutz zur Sicherung einer grenzüberschreitenden nachhaltigen Entwicklung

European Educational Concept in Environmental-, Nature- and Climate protection to safeguard Cross-Border Sustainable Development

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Green jobs and education – in Hungary

1. The position of environment protection in Hungary

In Hungary the issue of environment protection has become an important issue relatively late, f. ex:: fist the schools joined the Day of the Earth movement in 1990, 20 years after its international introduction.

National environmental frameworks:

International Sustainability Council 2007

National Sustainability Development Strategy 2007

National Energy Strategy till 2030 2012

National Sustainability Development Framework Strategy 2013

In the first period of market economy the issue of environment was not given much priority. The effects of previous damages can still be detected.

There are few things that helped to speed up the environment conscious attitude

- environmental desasters that struck the country (cyan pollution, red sludge, unresolved water base problems dating back to the change of the system, chemicals used in agriculture...) disasters related to climate change, global warming
- the EU accession, acceptance of agreements, market expectations
- green NGO-s, parties were founded
- NGO supported awareness raising in some issues (i. e. protests, consciousness forming activities were launched)
- the acceptance of environment consciosness at the level of the individuals and businesses meanwile the national organisational board – that would

coordinate them at national level - is missing. It is represented only at local actions

- employment crisis
- internationally available financial resources mainly EU funds to support researches and projects with trainings on environment protection, green economy and attitude forming

These are the factors that would inspire NGO-s and eco-conscious citizens to carry out larger actions exceeding local interest from EU fundings

Good example for climate training founding by EU source:

The Energy Club in Hungary has been working on the dissemination of a new attitude towards the topic. The Club is a combination of a non-governmental methodology research center and a departmental-political institute in the form of association.

Besides, local governments have an influential role in this matter, and started to deal with the issue seriously, maybe, because problems that come up (in connection with pollution or economic impacts) need urgent actions locally. A new organisation called "Climate-friendly settlements" with 35 members were formed in order to make adjustment to the inevitable changes easier, and help them cope with challenges, and set up their own climate strategy.

Source: https://www.energiaklub.hu/projekt/klimavalasz-kepzesek-az-eghajlatvaltozashoz-valo-alkalmazkodas-elosegitesere-helyi-szinten-3751

Activities related to environment industry and the environment sector

Business activities		
	Applied equipment, production of special materials	Construction of buildings, Installation of facilities
Scopes of Environment		
Direct pollution management		
Air -, water-, soil-, noise etc. reduction, defusion, measuring		
Garbage collection and placement		
Resource management		
Nature protection		
Garbage procession		
Renewable energy		
Bio products		
Indirect environmental activities		
Eco-friendly construction		
Eco-design		
Other clien technologies		

2. Adult education system and green adult educations - in Hungary

In Hungary there is an adult education law which regulate the out-of-school system trainings and the institutes too. A national statistic office collect party data about this sector (https://www.ksh.hu/docs/hun/xftp/stattukor/felnottoktatas13.pdf)

Define adult education

In Hungary at present there is a school-based education: pupils start their school year at 6 with primary school. It is compulsory to study up to 16 years of age. The secondary school time - in high school or in vocational school - takes time till 18 age. After secondary schools students can continue their studies in a university or in this point can study in an adult education training.

The concepts used in "adult education" or "adult education training" does not yet have a clear, conceptual system. The terms used in different documents are not always the same. The concept of adult education, adult training, broadly refers to the training of people who have reached the age of majority, but some documents are also used with other meanings.

The concept of adult education can be used in the Adult Education Act, where it is used for training outside the school system. It is essential that the participants of the training are not students or have a student relationship with the training institution. Adult education can take part in a person who has completed his compulsory schooling but can also engage in adult education while fulfilling the compulsory schooling requirement.

Teaching can also be organized by day, evening, correspondence or other special work schedules.

Adult training can be provided by a wide variety of types of organizations: legal persons, business associations without legal personality, individual companies, private entrepreneurs, public education institutions maintained by the State Institution Support Center for National Public Education.

Adult training can be very varied, such as:

- A) vocational training for obtaining a vocational qualification (OKJ vocational qualification) under the Act on Vocational Education and Training,
- (B) other supported professional training,
- (C) general supported anguage training,
- (D) other supported training not included in points (a) to (c).

However, the Adult Training Act does not regulate many training typically used by adults. Such training includes training in professional service (military, police, etc.), certain trainings of civil servants, professional training in the health sector, and further training of teachers.

In summary, it can be stated that adult education, adult training, is divided into several areas, that is, it can be grouped in several ways.

The most commonly used categories for the training institution are:

- 1. school education or training: aimed at obtaining general, secondary or tertiary education and / or professional qualifications, regulated by the National Education Act and the Act on Higher Education at the legal level,
- 2. out-of-school training outside the traditional school system: these are fundamentally governed by the Adult Education Act except for those that are already covered by other legislation (these are usually training related to specific sectors).

Controlling authority in the filed of adult trainings:

Trainings in non-formal adult education have been controlled by the state since 1st June 2016. The state determines the number of participants of the one- year cycle courses, supports the trainings for jobs in shortages with regard to subsidized (state-aided) qualifications in non-formal education regulated by the adult education law.

The National Adult Education and Vocational Training Office www.nive.hu gives proposal for the vocational training structure in each county, and in each job three categories were defined.

- 1) state-aided (fully supported)
- 2) Partly supported
- 3) Non supported

Varied of training organisations:

- Business and non-profit organisations without external support focus mostly on their market potential, they can develop and organise research from EU resources
- NGO-s and multinational companies with their business culture bring about new needs and attitudes

- Besides NGO-s in the background several academic research centers, universities, colleges and associations took part in attitute-forming, hosting conferences in green topic
- Environment protection has no privileged place in the training structure of the national training system

Connecting green adult trainings to green job offers:

We have looked into the environmental trainings in the field of both vocational and adult training. It can be concluded that among the position of non-formal education trainings the number of those who get qualifications related to nature, - environment, and climate is relatively low.

It needs further analysis to clarify the exact number of participants of the present adult trainings, whether the wide training option meets the existing demand, and how the employee demand can be related to the idea of the "green workplace". It is essential to define the concept of the "green workplaces" in order to match the idea of the green workplace with the relevant training.

Good example for national founded cource: :

Fully supported courses in Tolna county

- o Environment technician
- Environment administrator
- Environment-measures field technician

These can take 1-2 years of adult training after secondary school studies.

Adult educations in green topic – May 2017:

These are finishing with special examination and certificate

Name of the qualifications	Organiser	Length of training
quamitations	RIVIERA Adult Education Institution 4400 Nyíregyháza, Új utca 35. Telefon: 42/313-032	240-360 hours
Municipal environmental technician	Géniusz Plusz Educational Company 1085 Budapest VIII. ker József krt. 69. fsz. 15. E-mail: info@geniuszplusz.hu 2500 Esztergom Kiss J. U. 82. E-mail: info@geniuszplusz.hu Tel.: 0620/255-5339	240-360 hours
	Géniusz Plusz Educational Company 1085 Budapest VIII. ker József krt. 69. fsz. 15. E-mail: info@geniuszplusz.huTel.: 0620/255-5339	960-1440 hours
Environmental technician	Roth Gyula Forestry Secondary School 9400 Sopron, Szent György utca 9. (+36) 99 / 506-470 (+36) 99 / 506-479 rothszki@t-online.hu	960-1440 hours
	KOTK Economy Secondary School Külgazdasági Szakgimnázium, 1074 Budapest, Szövetség utca 37. Telefon: 1-344-5202	960-1440
	OKTÁV Adult Education Institution Továbbképző Központ Zrt. Budapesti Iroda 1143 Budapest, Gizella út 42-44. Irodavezető:Juhász Dorottya Telefon: (1) 201 2408 E-mail: bpoktav@oktav.hu	960-1440 hours
	Energetic Secondary School 7030 Paks Dózsa györyg u. 95. 74/519-300 E-mail.:eszieszi.hu	960-1440 hours

	Szegedi SZC Gábor Dénes Secondary School 6724. Szeged Mars tér 14. E-mail: gabord@gdszeged.hu Telefon: 62/558-750	960-1440 hours
Environmental	Székesfehérvári SZC Bugát Pál Secondary School 8000 Székesfehérvár, Gyümölcs utca 15. Tel.: 06-22-312-073 E-mail: bugattitkarsag@gmail.com	240-360 hours
measurement technician	Géniusz Plusz Educational Company 1085 Budapest VIII. ker József krt. 69. fsz. 15. E-mail: info@geniuszplusz.hu 2500 Esztergom Kiss J. U. 82. E-mail: info@geniuszplusz.hu Tel.: 0620/255-5339	240-360 hours
Rural Development Technician	MÁTRIX Adult Education Institution 6000 Kecskemét, Énekes utca 2 - 3. (Énekes utca és Alkony utca sarka) Hrubi Diána képzési adminisztrátor Tel.: 06/70 779-7087 Email: hrubi.dia@matrixoktatas.hu	480-720 hours
Environmental administrator	OKTÁV Adult Education Institution Sinka Mihály tanfolyamvezető 33/435-755/170, 20/777-9243 sinka@oktav.hu debrecen@oktav.hu	960-1440 hours
Nuclear Environmental Technician	Energetic Secondary School 7030 Paks Dózsa györyg u. 95. Tel.: 74/519-300 E-mail.:eszieszi.hu	240-360 hours

Nuclear technician	Energetic Secondary School 7030 Paks Dózsa györyg u. 95. Tel.: 74/519-300 E-mail.:eszieszi.hu	740-800 hours
	MÁTRIX Adult Education Institution 6000 Kecskemét, Énekes utca 2 - 3. Hrubi Diána képzési adminisztrátor Tel.: 06/70 779-7087 Email: hrubi.dia@matrixoktatas.hu	480-720 hours
Agricultural and plan protection	BARHÁCS Education Company 1089 Budapest, Vajda Péter u. 10/a. Telefon/Fax: (36)1 216-4658 / (36)1 215-7041 e-mail: barhacs@barhacs.hu	480-720 hours
Technician	Projekt Educational Company 1063 Budapest VI., Szív utca 40. III. em. Telefon: (20) 337-8964 Tel./Fax: +36-1/604-2505 E-mail: varga.adrienn@oktatasok.hu	480-720 hours
	"IOSZIA" Dual Education Company 1066 Budapest, Teréz körút 12. Telefonszám: +36 (37) 301-649 Email cím: kepzes@ioszia.hu	480-720 hours
Water Technician	Szegedi SZC Gábor Dénes Secondar y School 6724 Szeged Mars tér 14. E-mail: gabord@gdszeged.hu Telefon: 62/558-750	900-1300 hours

Agricultural Technician	MÁTRIX Adult Education Institution 6000 Kecskemét, Énekes utca 2 - 3. (Énekes utca és Alkony utca sarka) Hrubi Diána képzési adminisztrátor Tel.: 06/70 779-7087 Email: hrubi.dia@matrixoktatas.hu	960-1440 hours
	Diana Vadász Adult Education Seconday School Fundation 6640 Csongrád, Jókai Mór u. 14. Tel., fax: 06 63/483-790	960-1440 hours
Agricultural Technician	Géniusz Plusz Educational Company 1085 Budapest VIII. ker József krt. 69. fsz. 15. E-mail: info@geniuszplusz.hu 2500 Esztergom Kiss J. U. 82. E-mail: info@geniuszplusz.hu Tel.: 0620/255-5339	240-360 hours
	Studium Education Studio 3529 Miskolc, Csabai kapu 25. Tel: 46/401-006	240-360 hours
	Budapest Öveges József Engeneering Secondary School 1117 Budapest, Fehérvári út 10. (06) 1/246-1579 (06) 1/246-1580	480-720 hours
Cooler, Air conditioner and heat pump equipment installer	Eszkimó Academie 108 Budapest, Kozma utca 4. telefonszám: +36-1/445-00-40	480-720 hours
	MÁTRIX Adult Education Institution 6000 Kecskemét, Énekes utca 2 - 3. Hrubi Diána képzési adminisztrátor Tel.: 06/70 779-7087 Email: hrubi.dia@matrixoktatas.hu	480-720 hours

Summary of research in green adult education:

- Basically, companies offer paid training
- There is a wide range of topics in the professional field
- In the official occupational centers the green topics are no priority as a supported training, rather than trainings which give general kwonledge f. ex: general administrator
- It is possible that if there will be more job offers in the green field the Official Labor Center could initiate such trainings
- Employers can send their staff to free training sessions in this case, lost time is their cost

3. Green job offers - Hungary

Green jobs is not a priority in job advertisements, it is difficult to decide what is a green job: any job done in a green economy (eg a driver) or a job is not a green economy, but it can be classified as a green job (eg. Environmental protection worker).

Our research was conducted on the www.profession.hu website between 1 March and 30 April 2017, for 60 days, where the full offer will be published, and from 1 to 30 June 2017. We were looking for bids on a green jobs portal where jobs are considered a green job by our self-classification, so the jobs advertised here are also diverse (eg cook).

During the first period, from March 1 to April 30, 2017, during the 60-day period, we have found the following job offers at the www.profession.hu job offer website, which has been taken over by other websites. www.workania.hu.

Our working method was the following: we were looking for jobs on the site for the project, then we opened the whole offer, read the details, and decided whether the employer's institution or organization could be classified in the green economy.

We used the definition of the "green" workplace is taken from the study of Dr. Vilma Éri

1. PART: Analysis job offers between 01.03.2017 – 30.04.2017. from national jobs portal:

Job offers	Number of hits	Percent of total hits
Project Management	472	13,30%
technician (electrician, mechanic, laboratory assistant, network supervisor)	435	12,12%
IT specialist, informatics	412	11,47%
administrative tasks, assistants, process officer	369	10,28%
media, public relations, communication	277	7,71%
promoting, acquisitions, advertising	255	7,10%
process technician, process engineer	249	6,93%
quality management, safety	196	5,46%
construction engineering	162	4,51%
food chemist, food technician, chemist, microbiologist	106	2,95%
assembly, construction preparation	104	2,89%
financial services-, insurance agents	72	2%
construction foreman	71	1,97%
logistics	71	1,97%
developer (product, projects)	65	1,81%
electronics engineer/ electronics, automation	63	1,75%
research associate (regenerative energies, studies)	40	1,11%
florists, gardener, bee keeper	39	1,08%
business administrators	33	0,91%
biologistics, forest ranger, landscaping ecologist, nature prottection, gardener	32	0,89%

utility engineer, air conditioning-heating-ventillation	21	0,58%
Advisor/administrator "Sustainable Tourism & Regional		0,47%
Development"	17	2,11,1
Hottelier, janitors, cleaning staff	11	0,30%
education commissioner, trainer, environmental pedagogy	8	0,22%
zoning, landscaping, geographical information systems (GIS),		0,08%
landscape architecture	3	0,06%
Advisor/administrator "Circulatory economics, waste		0,08%
management & planning	3	0,0676
project engineer for water protection, water/sewage	1	0,02%
jurists, paralegals (energy, environment, natural preservation)	1	0,02%
Cook (vegetarian)	1	0,02%
Climate Protection Commissioner	0	0%
sound dampening engineers, sound measurements	0	0%
geologists / hydrogeologists	0	0%

2. PART: Analysis job offers between 01.05.2017 – 31.05.2017. from the same national jobs portal than previous period:

Job offers position	Details	Employer
Project manager and assistant	A manager and an assistant position for a Social enterprises development project	IFKA Industry Development Company
Maste management assistant	Experience with at least 3 years of waste management or similar.	VERTIKÁL Waste Company
Coordinator	We are looking for a new employee to perform accredited measurement and sampling tasks - with experiences	
Projectmanager		Duna-Ipoly National Park Directorate

Nature conservation assistant	Mssistant nosition in a national nark	Hortobágyi National Park Directorate
Project assistant	Project manager position	GreenDependent Company

Source: http://www.greenfo.hu/

We attached an excel file with graph about the job offers to this research.

Job offers from another website in the same period:

Algorithm development related to bioinformatic analyzes bioinformatic plant – analyzes	Job offers position	Details	Employer
Special filed: Gas chromatographic biogas quality determination and evaluation of results FIBAG Biogas Company	Lead environmental administrator		VASIVÍZ Water Company
biogas quality determination and evaluation of results Storekeeper Storekeeper in the biggest used processing network in the courty Laboratory technician Filed: Forestry plant looking for an electrician for the environmental company's site Worker protection advisory Work and fire advisory Mathematician - biologist researcher biogas quality determination and evaluation and evaluation and evaluation and procesults BIOFILTER Environmental Company FALCO Company FALCO Company GREENPRO Environmental Company ERGONOM Environmental Company ENVIROINVEST Environment Company Special filed: Algorithm development related to bioinformatic analyzes bioinformatic plant — analyzes	Energetic	_	Richter Gedeon Company
processing network in the courty Company FALCO Company FALCO Company FALCO Company FALCO Company GREENPRO Environmental Company Worker protection advisory Work and fire advisory FRGONOM Environmental Company Special filed: Algorithm development related to bioinformatic analyzes bioinformatic plant — analyzes	Research and development leader	biogas quality determination and	FIBAG Biogas Company
Company Comp	storekeeper	,	
Company	Laboratory technician	Filed: Forestry plant	FALCO Company
Mathematician - biologist researcher Special filed: Algorithm development related to bioinformatic analyzes bioinformatic plant – analyzes	Electrician	1	Environmental
Algorithm development related to bioinformatic analyzes bioinformatic plant – analyzes	Worker protection advisory	Work and fire advisory	
	_	Algorithm development related to	ENVIROINVEST Environmental Company
working protection interfer dedeon company	Security and safety officer	bioinformatic plant – analyzes working protection	Richter Gedeon Company

Source: https://www.profession.hu/

Summary of research in green job offers:

- ⇒ We asked the Ministry of National Economy for their help if they have a database that separates the green jobs the answer was that there is no such report at the national level
- ⇒ The green topic is not so much to get into larger specifications or to make separate statistics, to get attention. There is an aspiration to strike this strategy but we look at the current labor market, we see that we are not focusing on this. In the tendencies there is an increase in this area, and this is not controversial.
- ⇒ The size of Hungarian job market is not comparable with the larger EU countries job markets especially not in green jobs .