



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND



SEBE – Sustainable and Innovative European Biogas Environment

Work package 5: Training and education environment

Country: Slovenia

Author:

Scientific Research Centre Bistra Ptuj



February 2011

TABLE OF CONTENTS

LIST OF FIGURES..... 2

LIST OF TABLES 3

EXECUTIVE SUMMARY 4

1. INTRODUCTION 5

2. COUNTRY EDUCATION..... 5

3. EDUCATION WITH (PARTIAL) FOCUS ON BIOGAS (COUNTRY LEVEL). 16

3.1. Suppliers to biogas facilities..... 16

3.2. Operators of biogas plants..... 17

3.3. Technical Suppliers of biogas plant equipment..... 24

3.4. Operating environment (legal, economic, logistics and financing) 27

4. EDUCATION IN REGIONS 36

5. SPECIFIC ASPECTS 37

5.1. Country characteristics 37

5.2. Summary of Positive Aspects 37

5.3. Summary of Negative Aspects..... 37

6. REFERENCES 38

ANNEX..... 39

LIST OF FIGURES

Figure 2-1: Structure of the education system in Slovenia	7
Figure 2-2: Share of students on tertiary education by fields of study (by International standard classification of education ISCED 1997), academic year 2008/2009	11
Figure 4-1: Regions of Slovenia with biogas infrastructure and educational capacities with focus on RES	36

LIST OF TABLES

Table 2-1: Proportion of population aged 15 and over by educational attainment in 2003 and 2008.....	8
Table 2-2: Universities, their members and study programs	8
Table 2-3: Number of students in higher educational institutions in academic year 2008/2009	9
Table 2-4: Students on tertiary education by fields of study (by International standard classification of education ISCED 1997), academic year 2008/2009.....	11
Table 2-5: Organizations providing continuing education in school year 2008/2009	13
Table 2-6: workshops/trainings 2000 to 2009	13
Table 2-7: Number of students from 2000 to 2009.....	14

EXECUTIVE SUMMARY

The Constitution of the Republic of Slovenia (1991) stipulates freedom of choice in education and regulates fundamental rights in the area of education by determining that: education is free; compulsory basic education is the responsibility of the state; the state must finance compulsory education with public funds, it is the responsibility of the state to give its citizens the opportunity to obtain adequate education. The Slovenian education system consists of: pre-school education, basic education (single structure of primary and lower secondary education), (upper) secondary education: vocational and technical education, secondary general education, higher vocational education, higher education.

Responsibilities for the development and operation of the system of education are distributed between the Ministry of Education and Sports, Ministry of Higher Education, Science and Technology, local communities (municipalities), professional councils, appointed by the Government of the Republic of Slovenia, and institutions that are established for development and consulting in the field of education (National Education Institute, Institute of the RS for Vocational Education and Training, Slovenian Institute for Adult Education, National Examination Centre).

State-approved programs are provided by public or private schools. They must meet the personnel and material conditions and must be entered in the register of schools at the ministry. Education and training which do not provide state-approved education, is not legally regulated and it is left to the initiative of enterprises and schools. Private educational organizations are engaged in those programs.

Primary and secondary educational institutions are located in all Slovenian regions. Three public universities are located in three biggest towns in Slovenia (Ljubljana, Maribor, Koper). But tertiary educational institutions are located also in other regions because dislocated units of faculties and independent high education institutions are located in almost every Slovenian bigger town.

Higher education has three levels. The first is professional higher education programmes and university study programs, second level are Masters study programs and a third doctoral programs.

The number of students enrolled in tertiary education was rapidly increasing since year 2000 to 2006. Last few years the number of students enrolled has slightly decreased because of less numerous generations. The highest share of students in tertiary education is enrolled in study programs in the field of Social sciences, business and law (39%). 19% of students are studying in the field of Engineering, Manufacturing and Constructions. Number of students in the field of engineering and environment has risen in the last ten years. The reason is lack of experts in these fields and encouragements of the ministry for these studies.

We identified some educational programmes with partial focus on RES in Slovenia, but not with focus on biogas. In some of the programmes biogas is mentioned. The reason is that development of biogas plants is in early stage in Slovenia and there is a lack of knowledge and experience on this field.

On the other hand there were several informal trainings (seminars, workshops, conferences) with special focus on biogas. Most of these events are activities in the context of different EU financed projects because Slovenian organizations are involved in numerous biogas projects.

1. INTRODUCTION

The Slovenian Constitution guarantees free education to Slovenian nationals. Basic education is mandatory and funded from budgetary resources. The State is required to enable its citizens to obtain appropriate education. State universities and professional colleges are autonomous.

Members of ethnic minorities have the right to receive and further instruction in their mother tongue. Roma are likewise granted special educational rights. The state-wide official language of instruction is Slovenian. In the Hungarian-speaking area, bilingual instruction in Hungarian and Slovenian is compulsory. The Italian-speaking area hosts Italian secondary schools, where Slovenian is a compulsory subject, and Slovenian secondary schools, where Italian is a compulsory subject. There are also international schools (English and French). In higher education foreign language is possible alongside Slovene, or in parts of the programme where visiting professors are conducting lectures.

The majority of basic and upper secondary school pupils attend public schools (99 %), which are set up and funded entirely by the state and municipalities. Private schools, which are set up by private entities and provide education according to state-approved programmes, are subsidised by the state (the grant rate is approximately 85 %).

Higher education is offered by public or private universities and single higher education institutions. Universities and single faculties usually offer academic as well as professionally oriented courses, while professional colleges mainly offer professionally oriented courses. If a professional college meets the highest academic standards with regard to staff and resources, it may also be accredited to provide doctoral programmes; otherwise such programmes must be carried out and provided in co-operation with university or single faculty establishments.

Slovenia has two ministries dealing with education: Ministry of Education and Sport and Ministry of Higher Education, Science and Technology.

The Ministry of Education and Sport is responsible for education and training in the pre-university environment, including higher vocational colleges. The ministries carry out most of the financial, administrative and expert tasks; develop concepts and strategies, legislation and regulations on the basis of experts' opinions. The responsibility for tertiary education carries out the Ministry of Higher Education, Science and Technology. The sectors which fall under its authority include: universities and single higher education institutions, student residences and tertiary education libraries.

2. COUNTRY EDUCATION

Education in Slovenia starts with preschool education in public and private kindergartens. It is regulated by organic law and executive regulations. Educational activities involve almost all Slovene families with children who go to kindergarten or schools, adults who are doing advanced studies or training for life and work, or older adults who are perhaps attending university of third age.

Preschool education is carried out by public and private kindergartens. Kindergartens include children from the age of one until they enter school. Preschool education is not compulsory. Providing preschool education is one of the basic tasks of municipalities, which establish and fund kindergartens.

Compulsory **nine-year elementary school** falls into three-year cycles. Children enrol in nine-year elementary schools at the age of six.

Secondary education includes 98% of the population aged 15-19 in spite of being non-compulsory. It is divided into vocational and technical education, and general secondary education.

Vocational and technical education is the most diversified part of the educational systems. Education planning, programming and implementation are regulated by principles of social partnership. Students can receive short-term vocational education, secondary vocational education, secondary technical education or post-secondary vocational education.

General secondary education is carried out by *gimnazije* (general secondary schools). *Gimnazija* finishes with the *matura* examination, which is a general condition for admission to university and also allows enrolment in post-secondary and higher education.

Post-secondary vocational education supplements or rounds off the range of studies in tertiary education. Higher vocational education is defined as short-term higher education and study programmes are predominantly practical. Vocational colleges provide training in those skills that do not require a higher educational diploma.

Higher education comprises three levels. The first level included higher professional programmes and academic (university) programmes, the second level master's programmes and the third doctoral programmes. The first level relates to the undergraduate studies and the second and third levels to postgraduate studies. The duration of study programmes is limited in years (three to four years) and credit points (180 to 240 credit points). Study programmes must be in line with the EU study programmes. The second level maintains the master's studies. It encompasses from 60 to 120 credit points and takes one or two years to complete. The third level is the doctoral studies and lasts three years. Until the Higher Education Act was changed in 2004, there were two levels of higher education, undergraduate and postgraduate level. This change laid the foundation for the reform of programmes and their execution according to Bologna principles.

Adults can be educated in special educational programmes for adults or in programmes for young people. Educational organisations adapt the time of classes, duration, assessment and promotion system to adults and also recognise previously acquired knowledge. Slovenia has a network of peoples' universities, public educational organisations for adults, as well as a varied range of public schools and private organisations for adult education.

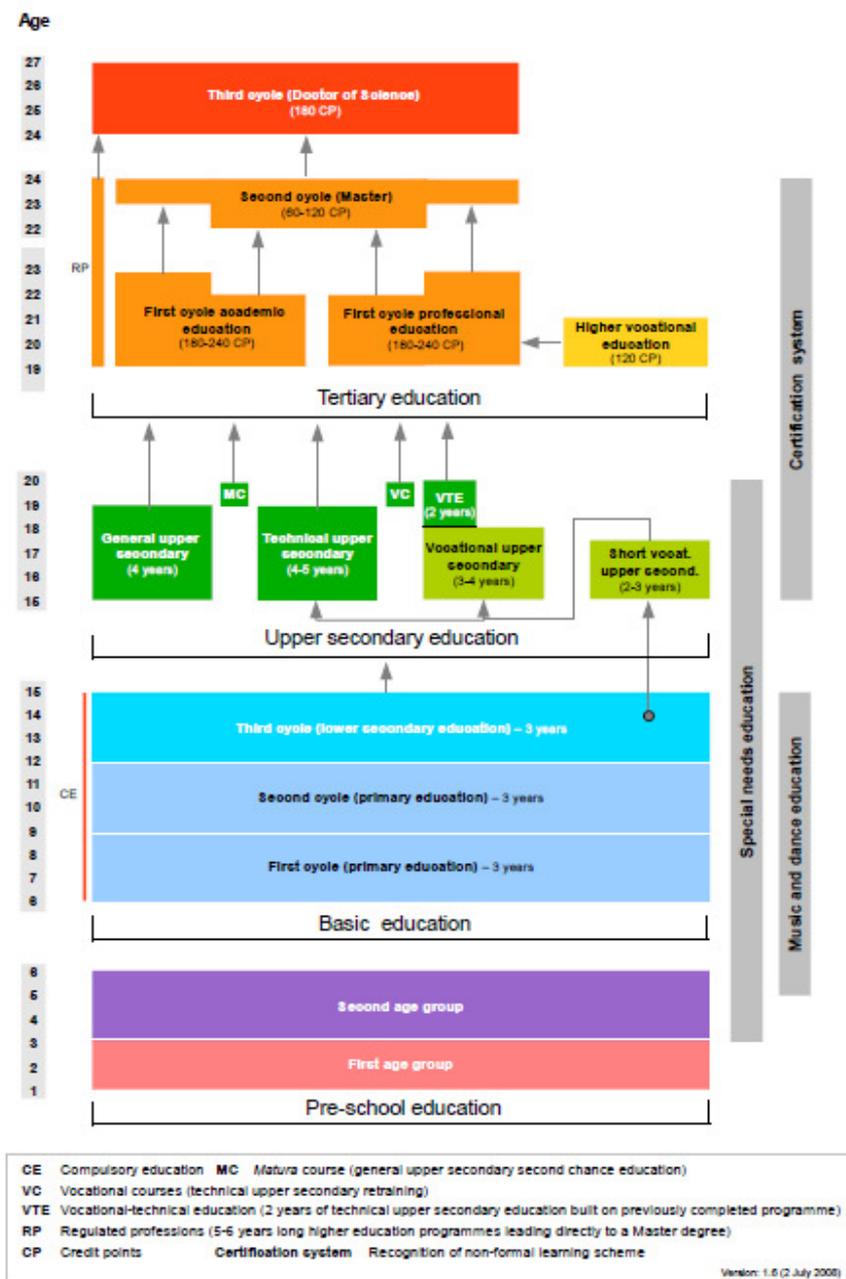


Figure 2-1: Structure of the education system in Slovenia

In the school year 2007/08 almost 450,000 children, youth and adults participated in education, which is 22% of the total population of the Republic of Slovenia. Slightly more than 60,000 children were enrolled in pre-school education in kindergartens, 166,000 in compulsory basic education, 106,000 in upper secondary education and 115,000 in tertiary education.

In Slovenia, the educational level of population is rising since the percentage of population with incomplete elementary school has dropped from 30,4% in 2003 to 26,5% in 2008 and percentage of population with completed tertiary education risen from 8,4% in 2003 to 12,1% in 2008 (Table 2-1).

Table 2-1: Proportion of population aged 15 and over by educational attainment in 2003 and 2008

	2003	2008
No education, incomplete basic	30,4%	26,5%
Basic	25,8%	24,8%
Short term vocational, vocational upper secondary	30,5%	31,2%
Technical, general upper secondary	5,0%	5,4%
Tertiary	8,4%	12,1%

The share of people aged 15 to 64 that were enrolled in non-formal education has been growing from 1997/1998 to 2007/2008. From 16,7% in 1997/1998 it grew to 23,2% in 2003/2004 and then slightly decreased. The average share of participations in non-formal education is 20 %.

Public expenditure for formal education in Slovenia in 2008 amounted to 1,94 million EUR, this is 5,2% of GDP. The highest share of public expenditure for formal education in GDP (2,36%) was intended for basic education, followed by tertiary education with 1,2% and upper secondary education with 1,6%.

Higher Education

Higher education institutions are public and private universities, faculties, art academies and professional colleges. Faculties and art academies can offer both academic and professional study programmes, while professional colleges offer only professional study programmes. The difference between university and professional institutions lies in research based studies and academic research activities. Beside the degree studies, higher education institutions offer also various supplementary and refreshing courses and other lifelong learning opportunities for adult students.

In school year there were:

- 3 public universities (University of Ljubljana, University of Maribor, University of Primorska) with 53 member institutions,
- 2 private universities (University of Nova Gorica, Euro-Mediterranean University) with 7 member institutions, and
- 26 single education institutions, of which 12 are receiving state subsidies.

Table 2-2: Universities, their members and study programs

Universities and independent high education institutions	Members	Study programs
University of Ljubljana	26	339
University of Maribor	19	152
University of Primorska	9	65
University of Nova Gorica	6	103
Euro-Mediterranean University	1	
Independent high education institutions	30	
Total	91	663

The biggest higher educational institution is University of Ljubljana (61,4% of all students studied there in academic year 2008/2009), 23,8% of students studied at University of Maribor, 6,6% at University of Primorska, 7,4% at single higher educational institutions and 0,7% at University of Nova Gorica (Table 2-3).

Table 2-3: Number of students in higher educational institutions in academic year 2008/2009

Higher education institutions - TOTAL	98.128
University of Ljubljana	60.284
University College of Health Care	1.901
Faculty of Arts	7.788
Faculty of Economics	8.352
Faculty of Law	2.191
Faculty of Social Sciences	4.775
Faculty of Sport	1.325
Faculty of Education	2.733
Theological Faculty	774
Faculty of Public Administration	1.369
Faculty of Social Work	3.070
Faculty of Mechanical Engineering	2.616
Faculty of Electrical Engineering	2.788
Faculty of Architecture	1.232
Faculty of Civil Engineering and Geodesy	2.142
Faculty of Chemistry and Chemical Technology	1.857
Faculty of Mathematics and Physics	1.337
Faculty of Natural Sciences and Engineering	1.879
Faculty of Computer Sciences and Informatics	1.719
Faculty of Naval and Maritime Transport	1.277
Biotechnical Faculty	3.826
Veterinary Faculty	456
Faculty of Medicine	1.912
Faculty of Pharmacy	1.171
Academy of Music	553
Academy of Fine Arts	514
Academy of Theatre, Radio, Film and Television	106
Interdisciplinary studies (UL)	621
University of Maribor	23.363
University College of Nursing Studies	-
Faculty of Education	1.495
Faculty of Economics and Business	3.436
Faculty of Organizational Sciences	2.790
Faculty of Law	1.676
Faculty of Criminal Justice	1.738
Faculty of Arts	2.015
Faculty of Electrical Engineering and Computer Science	2.555
Faculty of Civil Engineering	1.281
Faculty of Chemistry and Chemical Engineering	559
Faculty of Mechanical Engineering	1.318
Faculty of Logistics	1.353
Faculty of Natural Sciences and Mathematics	646
Faculty of Energy Technology	184
Faculty of Agriculture and Life Sciences	748
Faculty of Medicine	493
Faculty of Health Sciences	1.076
University of Primorska	6.490
Turistica - University College of Tourism	-

University College of Health Care	661
Faculty of Humanity Studies	966
Faculty of Management	2.270
Faculty of Education	749
Faculty of Tourism studies Portorož	1.651
Faculty of Mathematics, Natural Science and Inform. Technol.	193
University of Nova Gorica	725
High school for Viticulture and Enology	72
School of Humanities	126
School of Applied Sciences	12
School of Environmental Sciences	111
School of Engineering and Management	256
Graduate school	148
9 Single Higher Education Institutions	7.266
GEA College of Entrepreneurship	677
College of Business Administration	791
College of Business and Management	48
Arthouse - College of Visual Arts	2.212
College of Commercial Studies	953
College of design	-
College of Accounting	52
College of Polymer Technology	71
College of Technologies and Systems	65
Environmental Protection College	95
Higher school of applied sciences	136
College of Health Care Jesenice	242
College of Health Care Novo mesto	160
ISH, Graduate School of the Humanities	44
Postgraduate School of State and European Studies	64
School of Management - IEDC	41
European Faculty of Law in Nova Gorica	704
Faculty of Applied Social Studies	198
International School for Business and Social Studies	388
Faculty of Media Sciences	25
Politechnics	-
Jožef Stefan International Postgraduate School	173
Faculty of Information Studies	127

The highest share of students in tertiary education is enrolled in study programs in the field of Social sciences, business and law (39%). 19% of students are studying in the field of Engineering, Manufacturing and Constructions (*Figure 2-2, Table 2-4*).

Figure 2-2: Share of students on tertiary education by fields of study (by International standard classification of education ISCED 1997), academic year 2008/2009

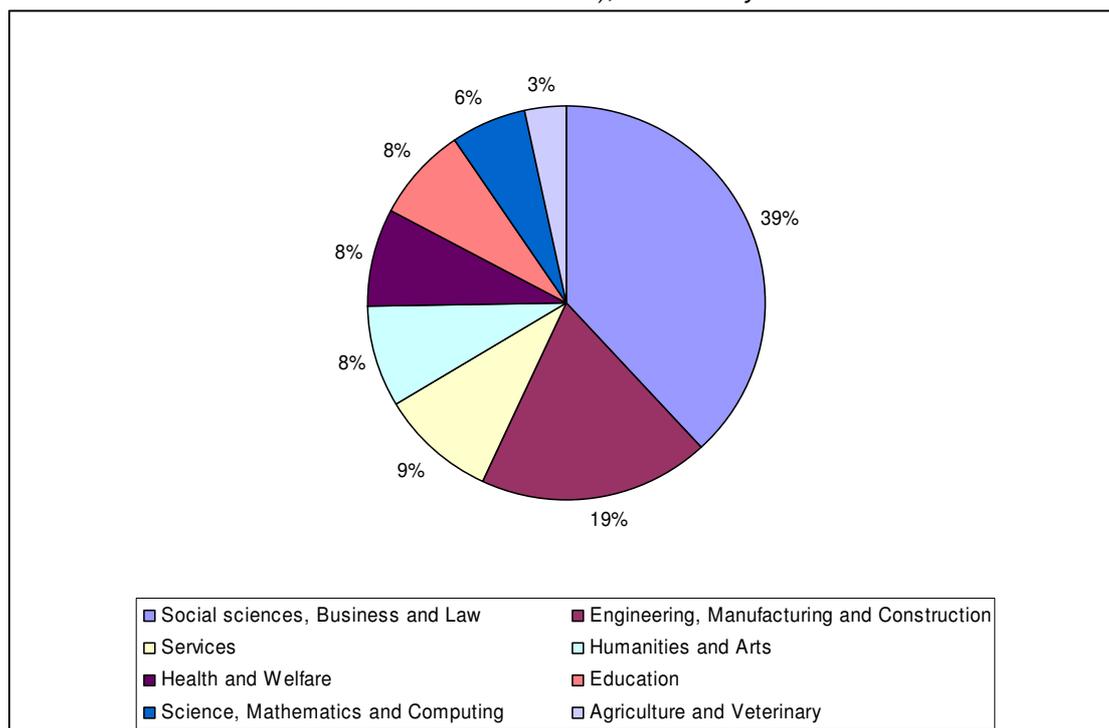


Table 2-4: Students on tertiary education by fields of study (by International standard classification of education ISCED 1997), academic year 2008/2009

Type of program	Total
1 Education	8.822
14 Teacher training	8.822
2 Humanities and Arts	9.341
21 Arts	2.261
22 Humanities	7.080
3 Social sciences, Business and Law	43.437
31 Social sciences	9.554
32 Journalism and information	704
34 Business and administration	28.608
38 Law	4.571
4 Science, Mathematics and Computing	7.066
42 Life science	1.483
44 Physical science	1.310
46 Mathematics and statistics	708
48 Computing	3.565

	21.787
5 Engineering, Manufacturing and Construction	
52 Engineering	12.197
54 Manufacturing and processing	4.382
58 Architecture and building	5.208
6 Agriculture and Veterinary	3.788
62 Agriculture and forestry	3.307
64 Veterinary	481
7 Health and Welfare	9.283
72 Health	7.982
76 Social services	1.301
8 Services	10.867
81 Personal services	3.215
84 Transport services	4.382
85 Environmental protection	979
86 Security services	2.291

Training and workshop structure (Continuing education)

Statistical data that is available in Slovenia is data about programs and participants in *continuing education* (vocational training, further vocational training and vocational training specialisation programs and general education programs with which participants do not obtain a higher level of formal education).

More than 85% of continuing education still for the needs of performing an occupation. A slightly lower number of participants in language programs. Besides driving schools, most continuing education programmes are implemented by organisations specialised in adult education. In the school year 2008/2009, 380 providers of continuing education implemented nearly 25,000 programmes and registered 327,000 participants, which is an increase of more than 10% over the previous year. The number of hours of continuing education increased by nearly 10%. In the observed school year slightly less than 80% of participants attended *non-verified programmes*, 15% attended *verified programmes* and less than 7% attended *language programmes*. As many as 85% of participants in non-verified programmes attended programmes for the needs of performing an occupation. The number of participants in programmes for general needs and leisure time changes from year to year. In the school year 2001/2002 the share was 20%, in the observed school year less than 13%.

Organizations providing continuing education are:

- folk high schools,
- other specialised organisations providing adult education, which are registered for adult education (institutions, limited liability companies, general partnerships, etc.),
- adult education units at elementary, secondary and other schools,
- education centres at enterprises and other business subjects whose main activity is not education,
- driving schools,
- other providers (libraries, social welfare centres, societies, associations, chambers, etc.).

Table 2-5: Organizations providing continuing education in school year 2008/2009

Providers (institutions)	Number of providers	Participations	Participations in non-verified educational programs	Participations in verified educational programs	Participations in language programs
Total	380	327.020	255.219	49.459	22.342
Folk high schools	32	25.917	17.552	2.760	5.605
Other special institutions	95	70.368	49.979	8.156	12.233
Parts of schools	33	12.831	10.516	1.487	828
Parts of enterprises	40	148.295	147.664	296	335
Educational centres at the Chambers of Commerce or Crafts	3	5.077	4.489	0	588
Vocational and professional associations	13	13.812	11.795	0	2.017
Driving schools	142	36.531	0	36.531	0
Other	22	14.189	13.224	229	736

Number of programmes in continuing education has fluctuated since year 2000 (Table 2-6).

Table 2-6: workshops/trainings 2000 to 2009

	workshops/seminars/trainings total (number of programs in continuing education)
2000	17.733
2001	19.529
2002	21.700
2003	21.512
2004	18.406
2005	19.703
2006	19.593
2007	22.721
2008	20.789
2009	No data available

The number of students enrolled in tertiary education was rapidly increasing since year 2000 to 2006. Last few years the number of students enrolled has slightly decreased. The reason is less numerous generations. In the field of business the number has strongly fallen due to filled labour market in the field of business and administration. On the other hand number of students in the field of engineering and environment has risen in the last ten years. The reason is lack of experts in these fields and encouragements of the ministry for these studies.

Table 2-7: Number of students from 2000 to 2009

	students total	students business (ISCED97:34 Business and administration)	students engineer (ISCED97: 52 Engineering and engineering trades; 54 Manufacturing and processing; 58 Architecture and building)	students agriculture (ISCED97: 62 Agriculture, forestry and fishery; 61 Veterinary)	students environment (ISCED97: 42 Life sciences; 44 Physical sciences; 85 Environmental protection)
2000	91.494	23.822	13.565	2.176	1.751
2001	99.214	25.007	13.582	2.562	1.830
2002	101.458	25.159	14.017	2.588	1.951
2003	104.396	23.511	14.207	2.680	1.964
2004	112.228	25.257	14.165	2.894	2.112
2005	114.794	26.745	13.792	2.884	2.175
2006	115.944	25.255	14.476	2.955	2.239
2007	115.445	23.293	15.342	2.959	2.277
2008	114.391	20.651	16.169	2.872	2.586
2009	114.873	18.988	16.484	2.663	2.914

The education level of the population is fast improving, since the share of the population with tertiary education is approaching the average in EU. The share of population in the 25-64 age cohort with tertiary education achieved 21.5% in 2006. Such a growth is a result of ever greater inclusion of the young in tertiary education. The share of typical population enrolled in tertiary education is still on the rise and it is also expected in the next years.

Economical and financial crises caused that demand for highly educated personnel has dropped. But the trends show that demand for highly educated personnel in developed countries will rise and that there will be shortage of these personnel in Slovenia. The biggest shortage is in occupational group of technicians. In the future the biggest demand will be for personnel in Informatics and Healthcare. Since there is great promotion of "green energy" in Slovenia, engineers from these fields will be also demanded in the future.

E-learning

Slovenia is roughly around the EU average with respect to all basic ICT indicators. This is also true for ICT literacy. The younger segments (16-24) are particularly computer literate. Employee training for ICT usage is well developed, as is specialised ICT training, which is provided on the commercial market. ICT is routinely used in general education and training within the business sector, the tertiary sector and also in all primary and secondary schools (at least PCs and overhead projectors). With respect to general educational communication infrastructure (i.e. Internet and broadband access for schools, LAN, websites etc.), Slovenia is one of the most advanced in the EU). Furthermore, all schools have computer laboratories. However, the PC ratio per 100 pupils is relatively low, 8 in Slovenia, 12 in the EU15, and 7 in the EU10. This is also one of the causes for relatively low usage of ICT by teachers in the classroom and other educational usage of ICT in schools.

One third of primary and secondary schools have developed ICT-based materials and use ICT tools in learning approaches. In 2006, one third of tertiary education institutions reported using virtual learning environments and learning management systems.

E-Learning is in a relatively early stage of development. Problems of economy of scale have prevented more usage in Slovenia, particularly in previous years, when friendly and cheap (or open source) tools were not yet available. User attitudes towards eLearning are mixed.

On the one hand, informal learning on the Internet is expanding very rapidly. On the other hand, the general public does not perceive the education obtained via on-line course as being equivalent to a traditional education. Consequently, teaching in the virtual learning environment has not yet had any major impact on information society development. However, the elementary usage of ICT (PC, projector, Internet, etc.) has already become a routine in the teaching process at all levels.

E-Learning offers a very promising opportunity for Slovenia to take full advantage of the comparative advantages of the country, which are: traditional openness to ICT, high enrolment in education activities, and the flexibility and smallness of the country and its educational system. The investment needed to establish an advanced national e-Learning system would also be relatively small, particularly when compared to the potential outputs.

Education of seniors

Education of seniors in Slovenia is well organized through Third Ages Universities which are located all over the country.

The Third Age University of Slovenia is a voluntary educational movement, meant for 50+, mostly retired people, but also for elderly workers out of work. It has been established to provide access to culture and education for the elderly and to contribute to changing the social and economic position of the elderly. The Third Age University encompasses at present 38 universities all over the country. Each Slovenian university organises study circles, lectures, and some of them also summer universities, educational camps, study trips, etc. The Third Age University has different goals to accomplish, be educational or social.

Objectives:

- to stimulate the development of the education of the elderly for social roles, personal growth, second career and active citizenship,
- to conduct education of the elderly,
- to educate mentors and other professionals,
- to investigate education of the elderly and to raise public awareness in the field,
- to offer counselling on the local, national and international level,
- to conduct public campaigns aiming at changing the position of the elderly in the society,
- to design new educational programmes for the elderly and other adults.

Slovenian University of the Third Age is a founding member of the European network of Universities of the Third Age (LILL), based in Ulm. It has an advisory role and an expert in the field of employment, education and active aging in AGE Platform Europe in Brussels.

Most important energy industry trainings for graduates

"European EnergyManager" training programme EUREM

Training is part of EU project EUREM.NET which aimed at expanding the successful "European EnergyManager" training programme EUREM (www.european-energymanager.net) to 12 further EU countries. Therefore four main goals were determined at the beginning by the EUREM.NET partners, in order to implement a standardized qualification for European EnergyManagers (EUREM) throughout Europe:

1. EUREM courses running in twelve EU countries
2. Continued development of the EUREM training materials
3. National acceptance of EUREM European wide certificate
4. Formation of a network for European EnergyManagers

Education by a certified educational program EUREM provides energy managers and related personnel a wide range of knowledge they need for their demanding work, and encourages them to cooperate within the network of European energy managers.

So far, more than 1,600 energy managers have been trained, mostly in Germany. In Slovenia there are 72 energy managers, this is the highest number according to number of inhabitants.

The Msc Consortium for Energy Companies

The Faculty of Economics (University of Ljubljana) has in 2004 launched a Consortium Master's for the energy companies. They intend to link all the interested parties in different energy companies in Slovenia. The aim of the study programme is twofold. First, it sets out to impart the knowledge necessary for the successful management of any company in any line of business. Second, it aims to provide the students with specific knowledge in the energy sector environment and energy markets.

The two-year programme begins with an induction module in the form of a two-day meeting intended to introduce the programme, the participants, the faculty and the programme procedure. The induction module introduces the students to the selected managerial techniques and skills required in team work, presentations and stress management, thereby laying the foundation for successful studies. The programme is ended with a Final module.

3. EDUCATION WITH (PARTIAL) FOCUS ON BIOGAS (COUNTRY LEVEL)

We identified some educational programmes with partial focus on RES in Slovenia, but no with focus on biogas. In some of the programmes biogas is mentioned. But there were several informal trainings (seminars, workshops, conferences) with special focus on biogas. These trainings were not intended for specific target group (suppliers, operators, technical suppliers, operating environment or R&D of biogas technologies) but for general public with various topics on biogas.

3.1. Suppliers to biogas facilities

Name of the institution	Chamber of Agriculture and Forestry of Slovenia
Name of studies	
Address	Celovška 135, 1000 Ljubljana
Phone	00386 (0)1 51 36 600
Fax	00386 (0)1 51 36 650
e-mail address	kgzs@kgzs.si
Web page	www.kgzs.si
Brief description of the institution	Slovenia's Chamber of Agriculture and Forestry plays a crucial role in supporting the activities of the country's agriculture and forestry sector and in promoting rural development. The Chamber is a non-government organisation which, by law, must be involved in the creation of any legislation or national strategies involving agriculture or forestry in Slovenia. The Chamber serves as a liaison between the government and individuals and enterprises involved in agriculture and forestry activities in Slovenia, and it represents the agriculture and forestry sectors abroad. One of the Chamber's most important tasks is also the implementation of measures relating to the common agricultural policy. The Chamber advises to farmers how to gain funds from these measures. The Chamber has more than 112.000 members, including individuals (primarily owners of agricultural land and forests), agricultural co-operatives, and enterprises involved in the agriculture sector. The Chamber has also founded eight agricultural institutes which provide training, education, advisory services, and support for farmers concerning their projects. These institutes implement training and education from different fields.
Type of education	seminars
Mode of education	face to face
applicant qualification	Seminars are intended for member of Chamber of Agriculture and Forestry (farmers). No special qualifications are needed.

Scope	RES, BIOGAS
learning description	All eight institutes are implementing trainings and seminars from different fields. In year 2010 there were 5 one-day seminars about renewable energy sources in agriculture: Supports and obstacles at development of agricultural bio-gas plants in Slovenia; Renewable energy sources - comparison between different ways of taxing agricultural activities; Renewable energy sources in agriculture and forestry as a supplementary activity (2x); Renewable energy sources.
certification description	No certificate
potential utilization	Farmers can use this knowledge when they plan to have supplementary business in farms.
evaluation by the participants	/

3.2. Operators of biogas plants

Name of the institution	School Centre Šentjur
Name of studies	nature-protection
Address	Cesta na kmetijsko šolo 9, 3230 Šentjur pri Celju
Phone	00386 (0)3 746 29 00
Fax	00386 (0)3 746 29 02
e-mail address	solski.center-sentjur@guest.arnes.si
Web page	www.sc-s.si
Brief description of the institution	School of agriculture in Šentjur is among the oldest in Slovenia. It was established in 1909 as the first school of agriculture with Slovenian teaching language in Habsburg Monarchy. In 1930, Household school was established; its founder was the then mayer and musician Gustav Ipavec. Till September 1997 the school was named Secondary school of gardening, agriculture and housekeeping Celje, in September 1997 it became an independent school, titled: School of agriculture and housekeeping Šentjur. Today students educate themselves at ŠC Šentjur in secondary-school programs for different professions in the field of agriculture and food technology. After concluded secondary-school education they continue with study in post-secondary (or college) programs (Managing countryside and region, Food technology and nutrition, Catering industry and tourism, Environmentalism).
Type of education	Secondary education
Mode of education	Face to face
applicant qualification	The educational program is open to anyone who has successfully completed: primary education or lower vocational education or equivalent education under the previous regulations.
Scope	Environment, RES, BIOGAS
learning description	Students learn to: identify the impacts of human activity on nature and environment; maintain the natural and cultural landscape and implement conservation measures for the vitality of the protected area; inform the public about the importance of natural assets, protection of natural assets and resources, environmental protection and spatial planning; cooperate with the specialist services in the preparation of professional planning; monitor the implementation of environmental protection measures; implement control and guide visitors around the protected area; analyze the parameters of the environment; use of modern information and communication technology; cooperate and the create of a permanent system of values. Education program lasts for four years. Students have to attend several general high school subjects and some environmental subject. There are some optional subjects and among them it is Production of biogas. Students get qualifications for these national Vocational Qualifications: nature-protection laboratory officer, keeper of natural and cultural

	landscape, coordinator for sustainable development and landscaping, guide in protected areas, processor of organic waste and manager of biological and constructed wetlands for wastewater treatment, processor of biomass, producer of biogas, producer of biodiesel.
certification description	national recognized educational programme
potential utilization	Student employment opportunities: working in research laboratories, companies where there is production quality standards related to ecological balance and pollution, water management companies and municipal utility companies, companies for processing and recycling of waste, spatial planning companies and authorities, farms and agricultural holdings, wetlands for wastewater treatment, coordination of sustainable development, different authorities, institutions on local and state level, manufacturing companies (food, pharmaceutical, chemical... companies)...
evaluation by the participants	/

Name of the institution	Biotechnical school Maribor
Name of studies	nature-protection
Address	Vrbanska cesta 30, 2000 Maribor
Phone	00386 (0)2 235 37 00
Fax	00386 (0)2 235 37 01
e-mail address	info@bts.si
Web page	www.bts.si
Brief description of the institution	The school was established in 1872. In school year 2010/11 there were 380 students enrolled, who are arranged into 14 different departments. In school you can educate in three-year, four-year and continuation (3+2) programs and irregular education programs (adult education). Today students train for different professions in the field of gardening, agriculture and environmentalism.
Type of education	Secondary education
Mode of education	Face to face
applicant qualification	The educational program is open to anyone who has successfully completed: primary education or lower vocational education or equivalent education under the previous regulations.
Scope	Environment, RES, BIOGAS
learning description	Students learn to: identify the impacts of human activity on nature and environment; maintain the natural and cultural landscape and implement conservation measures for the vitality of the protected area; inform the public about the importance of natural assets, protection of natural assets and resources, environmental protection and spatial planning; cooperate with the specialist services in the preparation of professional planning; monitor the implementation of environmental protection measures; implement control and guide visitors around the protected area; analyze the parameters of the environment; use of modern information and communication technology; cooperate and the create of a permanent system of values. Education program lasts for four years. Students have to attend several general high school subjects and some environmental subject. There are some optional subjects and among them it is Production of biogas. Students get qualifications for these national Vocational Qualifications: nature-protection laboratory officer, keeper of natural and cultural landscape, coordinator for sustainable development and landscaping, guide in protected areas, processor of organic waste and manager of biological and constructed wetlands for wastewater treatment, processor of biomass, producer of biogas, producer of biodiesel.
certification description	national recognized educational programme
potential utilization	Student employment opportunities: working in research laboratories, companies where there is production quality standards related to

	ecological balance and pollution, water management companies and municipal utility companies, companies for processing and recycling of waste, spatial planning companies and authorities, farms and agricultural holdings, wetlands for wastewater treatment, coordination of sustainable development, different authorities, institutions on local and state level, manufacturing companies (food, pharmaceutical, chemical... companies)...
evaluation by the participants	/

Name of the institution	Kmetijska šola Grm
Name of studies	nature-protection
Address	Sevno 13, 8000 Novo mesto
Phone	00386 (0) 393 47 00
Fax	00386 (0) 393 47 10
e-mail address	s-sksgrm.nm@guest.arnes.si
Web page	www.ksgrm.net
Brief description of the institution	School of agriculture Grm Novo mesto started educating for the needs of agriculture in castle Grm in 1886. Prior to this, the Carniola's country chorus bought estate, land, inventory and livestock for the school needs. With this event a farmer of Lower Carniola was able to come to his first cottage of professional knowledge - school of agriculture. Education programs changed through history, as well as the length of education and in some extent also the school's name, which in all combinations preserved the title Grm. Today students train for different professions in the field of agriculture, food technology, gardening and environmentalism.
Type of education	Secondary education
Mode of education	Face to face
applicant qualification	The educational program is open to anyone who has successfully completed: primary education or lower vocational education or equivalent education under the previous regulations.
Scope	Environment, RES, BIOGAS
learning description	Students learn to: identify the impacts of human activity on nature and environment; maintain the natural and cultural landscape and implement conservation measures for the vitality of the protected area; inform the public about the importance of natural assets, protection of natural assets and resources, environmental protection and spatial planning; cooperate with the specialist services in the preparation of professional planning; monitor the implementation of environmental protection measures; implement control and guide visitors around the protected area; analyze the parameters of the environment; use of modern information and communication technology; cooperate and the create of a permanent system of values. Education program lasts for four years. Students have to attend several general high school subjects and some environmental subject. There are some optional subjects and among them it is Production of biogas. Students get qualifications for these national Vocational Qualifications: nature-protection laboratory officer, keeper of natural and cultural landscape, coordinator for sustainable development and landscaping, guide in protected areas, processor of organic waste and manager of biological and constructed wetlands for wastewater treatment, processor of biomass, producer of biogas, producer of biodiesel.
certification description	national recognized educational programme
potential utilization	Student employment opportunities: working in research laboratories, companies where there is production quality standards related to ecological balance and pollution, water management companies and municipal utility companies, companies for processing and recycling of waste, spatial planning companies and authorities, farms and agricultural holdings, wetlands for wastewater treatment, coordination of sustainable development, different authorities, institutions on local and state level,

	manufacturing companies (food, pharmaceutical, chemical... companies)...
evaluation by the participants	/

Name of the institution	School Centre Šentjur
Name of studies	Nature conservation
Address	Cesta na kmetijsko šolo 9, 3230 Šentjur pri Celju
Phone	00386 (0)3 746 29 00
Fax	00386 (0)3 746 29 02
e-mail address	solski.center-sentjur@guest.arnes.si
Web page	www.sc-s.si
Brief description of the institution	<p>School of agriculture in Šentjur is among the oldest in Slovenia. It was established in 1909 as the first school of agriculture with Slovenian teaching language in Habsburg Monarchy. In 1930, Household school was established, its founder was the then mayer and musician Gustav Ipavec. Till September 1997 the school was named Secondary school of gardening, agriculture and housekeeping Celje, in September 1997 it became an independent school, titled: School of agriculture and housekeeping Šentjur.</p> <p>Today students educate themselves at ŠC Šentjur in secondary-school programs for different professions in the field of agriculture and food technology. After concluded secondary-school education they continue with study in post-secondary (or college) programs (Managing countryside and region, Food technology and nutrition, Catering industry and tourism, Environmentalism).</p>
Type of education	short cycle higher educational programme
Mode of education	Face to face, distance study
applicant qualification	In post-secondary programs individuals can enroll who: graduated from high school or secondary school or finished appropriate education according to previous regulations or have passed masterly, supervisor or managerial exam, have three years of work experience and have passed tests from general-education subjects in the extent, determined for vocational qualifications examination in secondary professional education.
Scope	Environment, RES
learning description	<p>Students learn about all fields of nature protection. Among other things they can choose subjects in the field of Natural and renewable energy sources (Management of natural and renewable energy sources, Technologies of renewable energy sources, Energy and environment perspectives, Practical training - renewable energy sources).</p> <p>Study lasts for two years. Study program is executed in school and at employers. Study year comprises of 34 weeks of educational work in the first and second year, of which there are 24 weeks of lectures, seminar and laboratory exercises in school and 10 weeks of practical training at employers or inter-firm education centers.</p> <p>Students get qualifications for these national Vocational Qualifications: Guardian of natural values and eco-remediations, Guardian of natural balances, Protected area supervisor, Technologist/manager of alternative energy sources</p>
certification description	national recognized educational programme - Nature conservation engineer
potential utilization	Students obtain broad professional theoretical and practical useful knowledge for work in the field of natural values protection, acquiring generic and profession-specific competences of professional field of natural values protection with emphasis on biotic diversity knowledge, eco-remedial measures, use of alternative energy sources and protection of protected areas. Among other things they also learn how to prepare a

	construction plan and accompany, execute and supervise technological procedures for acquiring energy and materials and manage the preparation of substrates, materials, alternative energy sources for trading.
evaluation by the participants	/

Name of the institution	Biotechnical centre Naklo
Name of studies	Nature conservation engineer
Address	Strahinj 99, 4202 Naklo
Phone	00386 (0) 4 / 277 21 45
Fax	00386 (0) 4 / 277 21 18
e-mail address	bcreferat@gmail.com
Web page	www.bc-naklo.si
Brief description of the institution	Origins of school date back to the start of 20. Century, when dairy school was established. In the 80's the school registered into Secondary dairy and agricultural school, in 2001 it was renamed into Secondary Biotechnical school and in 2002 directed to ecologic farming. Now school educates and trains high school students, students and adult participants in biotechnical field and associated activities (tourism, alternative energy sources ...). Biotechnical center Naklo comprises of secondary school, post-secondary school and inter-firm education center. In study year 2010/2011 a post-secondary program Environmentalism started.
Type of education	short cycle higher educational programme
Mode of education	Face to face
applicant qualification	In post-secondary programs individuals can enroll who: graduated from high school or secondary school or finished appropriate education according to previous regulations or have passed masterly, supervisor or managerial exam, have three years of work experience and have passed tests from general-education subjects in the extent, determined for vocational qualifications examination in secondary professional education.
Scope	Environment, RES
learning description	Students learn about all fields of nature protection. Among other things they can choose subjects in the filed of Natural and renewable energy sources (Management of natural and renewable energy sources, Technologies of renewable energy sources, Energy and environment perspectives, Practical training - renewable energy sources). Study lasts for two years. Study program is executed in school and at employers. Study year comprises of 34 weeks of educational work in the first and second year, of which there are 24 weeks of lectures, seminar and laboratory exercises in school and 10 weeks of practical training at employers or inter-firm education centers. Students get qualifications for these national Vocational Qualifications: Guardian of natural values and eco-remediations, Guardian of natural balances, Protected area supervisor, Technologist/manager of alternative energy sources
certification description	national recognized educational programme - Nature conservation engineer
potential utilization	Students obtain broad professional theoretical and practical useful knowledge for work in the field of natural values protection, acquiring generic and profession-specific competences of professional field of natural values protection with emphasis on biotic diversity knowledge, eco-remedial measures, use of alternative energy sources and protection of protected areas. Among other things they also learn how to prepare a construction plan and accompany, execute and supervise technological procedures for acquiring energy and materials and manage the preparation of substrates, materials, alternative energy sources for trading.
evaluation by the participants	/

Name of the institution	ICES – Educational Centre for energy system
Name of studies	Electro-energy technology
Address	Hajdrihova 2, 1000 Ljubljana
Phone	00386 (0)1 47 42 631
Fax	00386 (0)1 47 42 632
e-mail address	info@ices.si
Web page	www.ices.si
Brief description of the institution	In ICES they develop education programs and train employees for topical operational processes in production, distribution and electric energy transfer. Lately also more and more participants from other environments of economical activities are integrating into their educational processes. They ensure acquisition of unified standard of knowledge and skills in energy technology, internationally comparable knowledge to users of educational services, which helps individuals and companies at realizing their vision and achieving competitive advantage. Wide selection of education includes publicly valid post-secondary professional programs, training in the field of project management, they execute a variety of custom-made computer courses and shorter seminars. Publicly valid post-secondary professional programs are meant for adults, who need knowledge from energy technology, electronics and informatics at their work. For knowledge transfer on students of post-secondary professional school, lecturers, who have beside pedagogical-andragogical knowledge also a lot of practical work experiences, are held responsible. Post-secondary program Energy Technology started in 1996.
Type of education	short cycle higher educational programme
Mode of education	Face to face
applicant qualification	In post-secondary programs individuals can enroll who: graduated from high school or secondary school or finished appropriate education according to previous regulations or have passed masterly, supervisor or managerial exam, have three years of work experience and have passed tests from general-education subjects in the extent, determined for vocational qualifications examination in secondary professional education.
Scope	RES
learning description	Energy technology engineer has a broad professional-theoretical active knowledge and practical-applicable knowledge for working in energy technology. Study lasts for two years. Study fields: business communications, protecting and protection of environment, technical mathematics, basics of electrical engineering, applicable mechanics, hydrodynamics and thermodynamics, automaticity and measures in energy technology, basis of economics, projecting, energy technology, protection and effectiveness in energy technology, installations and protection in energy technology (inside this module students can choose a course titled Effective use and renewable energy sources).
certification description	national recognized educational programme – Electro-energy technology engineer
potential utilization	Working areas for energy technology engineer: plans maintenances and repairs in energy technology; creates a plan of project task or project execution; carries out measures in energy technology and sets relay protection; supervises operational state of devices of energy technology object; projects less demanding energy technology installations and objects; supervises the construction of less demanding installations and objects; runs a department, job or shift in the field of energy technology

evaluation by the participants	/
Name of the institution	Faculty of Energy Technology, University of Maribor
Name of studies	Energy Technology
Address	Hočevarjev trg 1, 8270 Krško
Phone	00386 (0) 76202 210
Fax	00386 (0) 76202 222
e-mail address	fe@uni-mb.si
Web page	www.fe.uni-mb.si
Brief description of the institution	<p>Faculty of Energy Technology of University of Maribor began with educational process in study year 2008/2009 and already enrolled 184 students in the first year. Faculty has headquarters in Krško and a dislocated unit in Velenje. Study is currently executed in energy environments, where a direct contact between students and energy masters is enabled.</p> <p>Faculty of Energy Technology carries out the following study programs:</p> <ul style="list-style-type: none"> - Higher professional study program Energy Technology (I. Bologna level) - University study program Energy Technology (I. Bologna level) and - Master study program Energy Technology (II. Bologna level). <p>In preparation is also the execution of PhD program Energy Technology (III. Bologna level). In this way students can decide as a part of study program for a choice of part of study obligations in the fields of: hydro energy technology, thermo energy technology, nuclear energy technology, alternative energy technology and general energy technology.</p>
Type of education	university
Mode of education	Face to face
applicant qualification	Anyone who finished secondary school with final exam (matura) can entry this programme.
Scope	RES
learning description	<p>University and master study program Energy Technology (1. and 2. level)</p> <p>Study goals in content area are directed to:</p> <ul style="list-style-type: none"> getting familiar with operation of organization in energy systems, getting familiar with managing an organization in energy systems, organizing and executing technological operations in a business company, organizing and executing technological processes in a business company, use of information management systems, use of modern technologies in energy systems, developing skills for searching and realizing successful professional decisions in energy systems with the use of modern professional and scientific methods. <p>In all courses topics relate also to renewable energy sources.</p> <p>University study lasts for three years, master study lasts for two years..</p>
certification description	national recognized educational programme – Bachelor/Master of Energy Technology Engineering
potential utilization	Program Energetika je usmerjen v usposabljanje človeških virov za opravljanje vodilnih in vodstvenih nalog v gospodarstvu in negospodarstvu, pa tudi v državni upravi (agencije, zavodi) na področju energetike: elektrogospodarstvo, proizvodnja in upravljanje z elektriko, oskrba s plinom, oskrba in upravljanje z alternativnimi viri energije, delo pri varovanju okolja in podobno.
evaluation by the participants	/

3.3. Technical Suppliers of biogas plant equipment

Name of the institution	Faculty of Mechanical Engineering, University of Ljubljana
Name of studies	Mechanical Engineering
Address	Aščekreva 6, 1000 Ljubljana
Phone	00386 (0)1 4771 200
Fax	00386 (0)1 2518 567
e-mail address	dekanat@fs.uni-lj.si
Web page	www.fs.uni-lj.si
Brief description of the institution	The Faculty of Mechanical Engineering (UL FME) is a member of the University of Ljubljana. With 50,000 students, it is the third largest University in Europe. The Faculty of Mechanical Engineering has been engaged in education, research and technical activities for over 60 years. The Faculty of Mechanical Engineering creates and disseminates knowledge that enables students and research business partners to take a competitive part in the international environment. Educational, scientific, research and technical activities are performed by 18 education and research units – Chairs – in 34 laboratories. Now the study of Mechanical Engineering is implementing in three cycles (first, second and third Bologna cycle).
Type of education	University
Mode of education	Face to face
applicant qualification	Anyone who finished secondary school with final exam (matura) can entry this programme.
Scope	OVE
learning description	The course lasts for 6 semesters, i.e. 3 years. In Year 3 students may select one of the following options: Power and process engineering, Design and mechanics, Mechatronics, micromechanical systems and automatization, Production engineering. In the course Power and process engineering there are courses about renewable energy sources.
certification description	national recognized educational programme – Bachelor/Master of Mechanical Engineering
potential utilization	Engineers can pursue a career in every company, in all industries; where new products are developed and manufactured; where there is a need for scientific and technical knowledge, as well as design and production, testing of materials and design, maintaining engines and mechanisms, introducing and maintaining information and software activities, organizing production management and in many other technical and economic activities. Other career opportunities: in power engineering, processing technology, transport and logistics, communal services, in education and research institutions; in service industries; in government and administrative bodies...
evaluation by the participants	/

Name of the institution	Faculty of Mechanical Engineering
Name of studies	Environmental Engineering
Address	Smetanova ulica 17, 2000 Maribor
Phone	00386 2 220 7500
Fax	00386 2 220 7990
e-mail address	fs@uni-mb.si
Web page	www.fs.uni-mb.si
Brief description of the institution	Faculty of Mechanical Engineering is a scientific, research and educational organization, which has been active for more than four decades. Lot of full time and part time students study in the programmes of Mechanical Engineering, Textile, Design and Textile Materials, Mechatronics, Industrial Engineering, higher professional level of Mechanical and Textile Engineering, and in postgraduate studies of programmes of Me-

	<p>chanical Engineering and Textile Engineering. New study programmes cover the knowledge of new courses of industrial design, environmental engineering, industrial engineering, mechatronics, mechanical engineering, eco-textile engineering, cloth engineering and industrial engineering in textile. Industrial engineering is an established profession which is constantly gaining importance. The ever more insensitive cooperation of the Faculty with industry requires a correct scientific and research direction of faculty. The research results are transferred to different branches of Slovenian mechanical engineering, metal processing and textile industry. An important fact is also the increased interest of students in study courses of the Faculty. The Faculty is one of the most successful members of University measured by success of the undergraduate students as well as by the number of postgraduate students, by its income or laboratory equipment. After all there are numbers of internationally acknowledged professors who take part in a well organized international exchange and cooperation. The Faculty has very precise vision of development based on quality in every activity and on successful results of international evaluation of the programmes and activities. Faculty invites students to enrol in perspective University and high professional study programmes.</p>
Type of education	University
Mode of education	Face to face
applicant qualification	Anyone who finished secondary school with final exam (matura) can entry this programme.
Scope	Environment, RES
learning description	<p>Course for first cycle lasts for 6 semesters, i.e. 3 years. Students learn about different fields of environmental engineering. One course is about renewable energy sources.</p> <p>Second cycle lasts 4 semesters, i.e. 2 years. Students gain in-depth knowledge about environmental engineering. There are also courses about renewable energy sources (Energy and environment, Fuels for sustainable development)</p>
certification description	National recognized educational programme – Bachelor/Master of Environmental Engineering
potential utilization	<p>Program offers wide possibilities for employment: expertise offices for planning and consulting, post-secondary schools and research institutions, in centers for computer modelling and analyzing demanding physical legitimacies of environment and products in planning, making and using procedure, in organizations, which work on planning, developing and supervising devices and musters for acquiring energy, in firms, where they research, develop, create or supervise demanding processing musters, in companies where they plan, introduce and supervise modern production technologies, in companies for development, introduction and supervision of mechanized, automatized and robotized production procedures, in departments of maintenance, in departments of integral quality management and everywhere, where operation process is anyhow connected to broader environment area.</p>
evaluation by the participants	/

Name of the institution	Faculty of Mechanical Engineering
Name of studies	Strojništvo – smer energetska, procesna in okoljska strojništvo
Address	Smetanova ulica 17, 2000Maribor
Phone	00386 2 220 7500
Fax	00386 2 220 7990
e-mail address	fs@uni-mb.si
Web page	www.fs.uni-mb.si

Brief description of the institution	<p>Faculty of Mechanical Engineering is a scientific, research and educational organization, which has been active for more than four decades. Lot of full time and part time students study in the programmes of Mechanical Engineering, Textile, Design and Textile Materials, Mechatronics, Industrial Engineering, higher professional level of Mechanical and Textile Engineering, and in postgraduate studies of programmes of Mechanical Engineering and Textile Engineering. New study programmes cover the knowledge of new courses of industrial design, environmental engineering, industrial engineering, mechatronics, mechanical engineering, eco-textile engineering, cloth engineering and industrial engineering in textile. Industrial engineering is an established profession which is constantly gaining importance. The ever more insensitive cooperation of the Faculty with industry requires a correct scientific and research direction of faculty. The research results are transferred to different branches of Slovenian mechanical engineering, metal processing and textile industry. An important fact is also the increased interest of students in study courses of the Faculty. The Faculty is one of the most successful members of University measured by success of the undergraduate students as well as by the number of postgraduate students, by its income or laboratory equipment. After all there are numbers of internationally acknowledged professors who take part in a well organized international exchange and cooperation.</p> <p>The Faculty has very precise vision of development based on quality in every activity and on successful results of international evaluation of the programmes and activities. Faculty invites students to enrol in perspective University and high professional study programmes.</p>
CVs	/
Type of education	University
Mode of education	Face to face
applicant qualification	Anyone who finished secondary school with final exam (matura) can entry this programme.
Scope	Environment, RES
learning description	<p>Course for first cycle lasts for 6 semesters, i.e. 3 years. Students learn about different fields of mechanical engineering. In third year they can choose to specialize in Power, Process and Environmental Engineering where they can learn also about renewable energy sources.</p> <p>Second cycle lasts 4 semesters, i.e. 2 years. Students gain in-depth knowledge about mechanical engineering and also learn about energy and environment.</p>
certification description	National recognized educational programme – Bachelor/Master of Mechanical Engineering
potential utilization	At the end of study graduates will become versatily applicable professionals, with a wide range of expertise, employable in almost all areas of economy. They employ in projection and construction bureaus for shaping, projecting and constructing different products, musters and constructions at the support of most modern computer technologies, in centers for computer modelling, optimizing and analyzing physical legitimacies of products at planning, creation and usage, in organizations which plan, develop and supervise devices and musters for acquiring energy, in firms where they research, develop and introduce environmental friendly energy sources, in companies where they plan, make and supervise demanding processing musters, in companies where they plan, introduce and supervise modern production technologies, in companies for development, introduction and supervision of mechanized, automatized and robotized production procedures, in departments of maintenance, in departments of integral quality management and everywhere, where operation process is anyhow connected to broader area, engineering..
evaluation by the participants	/

3.4. Operating environment (legal, economic, logistics and financing)

Name of the institution	University of Ljubljana
Name of studies	Environmental Protection
Address	Kongresni trg 12, 1000 Ljubljana
Phone	003886 (0)1 241 85 00
Fax	003886 (0)1 241 86 60
e-mail address	rektorat@uni-lj.si
Web page	www.uni-lj.si
Brief description of the institution	University of Ljubljana has accredited 156 1st cycle study programmes, 125 academic and 31 higher professional programmes. There are three interdisciplinary programmes (third cycle doctoral study programmes) which are organized by several faculties together. One of them is program Environmental Protection.
Type of education	University
Mode of education	Face to face
applicant qualification	Graduates of the following programmes may apply for admission: Second cycle study programmes.
Scope	RES
learning description	The duration of the programme is three years. The doctoral programme results in the degree of Doctor of Science including five different study orientations: Natural sciences, Technical sciences, Biotechnical sciences, Medicine, Social sciences and humanities. The main goal of the programme is the interdisciplinary education of highly-qualified experts in the scientific fields covered by the programme. The programme has an interdisciplinary character and is intended for offering in-depth knowledge in different aspects of environmental issues ranging from technical and biotechnical to medical, social and humanistic. One of the core courses in the programme is Energy and Natural Resource Management and one selective course is Renewable energy sources.
certification description	national recognized educational programme – PhD in Environmental protection
potential utilization	The possibilities for employment of graduates from the programme are very diverse. They are suitable for employment as experts or as important new personnel at universities and other educational and research institutions. The employment in public administration, health establishments, government offices, and in other institutions and companies dealing with research of environment, employing experts and researchers with the highest educational level is also possible.
evaluation by the participants	/

Name of the institution	Jozef Stefan Institute, Energy Efficiency Centre
Name of studies	EUREM
Address	Jamova c. 39, 1000 Ljubljana
Phone	00386 (0)1 5885 210
Fax	00386 (0)1 5885 377
e-mail address	ceu@ijs.si
Web page	www.rcp.ijs/ceu
Brief description of the institution	The Energy Efficiency Centre is one of the technology and consultancy centres of the Jožef Stefan Institute, which is the leading national natural science and technology institute complementing the role of the universities and bridging the gap between science and applications. The Institute is strongly engaged in applied and contractual research, and it has es-

	<p>established bountiful links with industrial enterprises, Government departments and other organisations. The Centre mission is to promote sustainable energy development. The strategy is to employ energy efficiency and decentralised energy supply based on combined heat and power production and renewable energy sources, and to promote modern methods of strategic energy planning at the national level. The Centre is involved in research, development and consulting in the field of strategic energy planning, greenhouse gases mitigation, energy conservation programmes and energy management. The Centre is a focal point for the transfer of new and innovative energy technologies, at the meeting point of energy users, the State, energy service providers, and other shareholders.</p>
Type of education	training
Mode of education	Face to face
applicant qualification	<p>Target group of the training Leading employee of enterprises which perform the following functions: Plant manager, production manager, Energy representative, Process engineer, operation technician, Facility manager etc...</p>
Scope	RES, BIOGAS
learning description	<p>Training is part of EU project EUREM.NET which aimed at expanding the successful "European EnergyManager" training programme EUREM to 12 further EU countries. Therefore four main goals were determined at the beginning by the EUREM.NET partners, in order to implement a standardized qualification for European EnergyManagers (EUREM) throughout Europe:</p> <ol style="list-style-type: none"> 1. EUREM courses running in twelve EU countries 2. Continued development of the EUREM training materials 3. National acceptance of EUREM European wide certificate 4. Formation of a network for European EnergyManagers. <p>The following topics are standard contents in the framework of the qualification concept European EnergyManager: Energy purchase and trade, energy laws, emission trade; Project management; Economy calculation; Energy data management/load management; Energy fundamentals; Energy requirement of buildings/energy efficient buildings; Heating; Process heat, steam, heat recovery; Cogeneration / Combined heat & power; Air conditioning; Chilling; Electrical engineering, Electrical drives; Light; Compressed air; Solar technology; Energy from biomass.</p> <p>Training takes place in four three-day block from October to June, when completed with the presentation of concrete projects for efficient use of energy produced by the candidates during the training, and awarding of certificates.</p>
certification description	The "European EnergyManager" certificate is awarded to the EUREM participants if the assessment of their work (written exam, energy concept, final presentation) is positive.
potential utilization	The course gives a systematic approach to the implementation of energy efficiency measures in different areas, enabling participants to substantially contribute to the energy consumption and cost reduction in their companies, and thus, due to lower CO ₂ emissions, also to a better environment.
evaluation by the participants	/

Name of the institution	Faculty of Management Koper
Name of studies	Managing sustainable development
Address	Cankarjeva 5, Koper
Phone	00386 5 610 20 00
Fax	00386 5 640 20 15
e-mail address	info@fm-kp.si
Web page	www.fm-kp.si
Brief description of the	The Faculty of Management Koper (FM) is a member of the University of

institution	<p>Primorska (UP). It is a higher education institution for education and research in the fields of social sciences and business management, with a stress on management, which has interdisciplinary links to economic, business, legal, organisational and behavioural sciences. In addition to education and research, the basic activities of the faculty are providing consultancy to companies and other organisations, publishing and library activities and organisation of international conferences. They develop undergraduate and postgraduate study programmes on the basis of their own and foreign research, by taking into accounts the concept of lifelong learning. They believe that in today's world knowledge has become the most valuable asset which needs to be constantly developed and upgraded.</p> <p>They co-operate with higher education and other educational and research institutions on the regional and national level, as well as internationally. We have established international co-operation with different higher education institutions. They have a very well developed international teacher and student mobility. Additionally, co-operation has been promoted through research projects, summer schools and international conferences. The faculty was established in 1995 as College of Management in Koper. In 2003 it was officially reformed as the Faculty of Management Koper and it became one of the members of the newly established University of Primorska.</p>
	The faculty is located in <u>Koper</u> but it also has two study centres in <u>Celje</u> and <u>Škofja Loka</u> where the study programmes also take place.
Type of education	University
Mode of education	Face to face
applicant qualification	Students who finished programme on first cycle can entry programme in second cycle.
Scope	Environment, RES
learning description	It is a second cycle programme. Course lasts for 2 years. It has four study fields: Sustainable management of economic resources, Sustainable management of natural resources, Sustainable management of cultural and spatial resources, and Sustainable management of environmental health.
certification description	National recognized educational programme, Master of Managing Sustainable Development
potential utilization	<p>Graduates are qualified for:</p> <ul style="list-style-type: none"> understanding a broader social and natural environment and globalization processes from the chosen study field point of view, understanding system connectedness between different questions and problems of continual development, independent developing and professional work, in-depth understanding, researching and application of new methods of planning, organizing, managing and constructing in organizations with respect to the needs of continual development, critical thinking and analytical solving of the most demanding interdisciplinary problems, connected to continual development, critical judging of managerial decisions from social and ethical organization responsibilities point of view.
evaluation by the participants	/
Name of the institution	Biotechnical Faculty, University of Ljubljana
Name of studies	Economics of natural resources
Address	Jamnikarjeva 101, 1000 Ljubljana

Phone	00386 1 320 30 00
Fax	00386 1 256 57 82
e-mail address	dekanat@bf.uni-lj.si
Web page	www.bf.uni-lj.si
Brief description of the institution	Biotechnical faculty's principal goal is the development and implementation of higher and high education programmes in the life science disciplines (biology, microbiology) as well as in agriculture, animal husbandry, forestry and the industries related to these disciplines (food or wood processing, biotechnology). All the educational and research disciplines provided at the Biotechnical Faculty incorporate the issues of management of natural resources (soil, space, flora and fauna, water). The Biotechnical Faculty, with its research into environmental resources and its sustainable management orientation, is an institution needed by every nation in its efforts to define and preserve its identity. Research and education in the area of life and nature obliges the Biotechnical Faculty to provide the professional and scientific foundations and an appropriate atmosphere in society that will enable the creation and development of a sustainable symbiotic existence between man and nature.
Type of education	University
Mode of education	Face to face
applicant qualification	Students who finished programme on first cycle can entry programme in second cycle.
Scope	Environment, RES
learning description	The master program (second cycle) is intended to provide general and specific economic knowledge in the wide field of managing natural resources. Students are qualified for understanding the economic and legal-political aspects on the level of farms, companies, non-governmental groups and state administration. They also obtain basic skills for management and administration in agriculture and related sciences. Candidates are directed through the choice of subjects into business and/or state administration aspects of operation. The study is planned to be multidisciplinary, project based and builds new development profiles of graduates who will take key responsible positions in the bossiness and state administration in the sphere of management of natural resources. The study also provides the basic knowledge required for further doctoral study in the field of the economics of natural resources. It lasts three years. Lectures and exercises are held in the first two years. The third year is devoted to elaboration of a master thesis. Subjects will be organised in the afternoon and at weekends. The program does not have specific study areas.
certification description	National recognized educational programme, Master of the economics of natural resources
potential utilization	Graduates have very wide employment opportunities in public services and in the business, in governmental and non-governmental sectors connected with the leadership, management, organisational and administrative work in the field of agriculture, forestry, food sciences, woodworking, environmental protection, European integrations and other fields.
evaluation by the participants	/

3.5 Education about biogas in general (covering different fields)

Name of the institution	Slovenian Energy Restructuring Agency (ApE)
Name of studies	Biogas in Agriculture
Address	Litijska 45, 1000 Ljubljana
Phone	00386 (0)1 586 38 70
Fax	00386 (0)1 586 38 79
e-mail address	info@ape.si
Web page	www.ape.si , www.big-east.eu
Brief description of the institution	<p>The Slovenian Energy Restructuring Agency (ApE) was established in 1991 as a private company with the agreement and support of the Ministry for Energy of the Republic of Slovenia. ApE is an independent agency and the collaboration with ministries is normally organized on the basis of public tendering processes and contract agreements. The services of ApE include analysis, consulting and feasibility studies, as well as implementation and dissemination processes. The Slovenian Energy Restructuring Agency analyses energy problems with focus on technical, structural, financial, legal, environmental and behavioural issues. Furthermore, it develops and presents recommendations for dedicated actions, offers information to decision makers and creates public awareness.</p> <p>ApE was partner in a project named BiG>East. This was a project financed from Intelligent Energy Europe Programme from 2007 to 2010. BiG>East promoted the production and use of biogas as a secure and sustainable energy source in several target countries of Southern and Eastern Europe. This was achieved by knowledge transfer from biogas experts of Western Europe to farmers, biogas plant operators and decision makers. In Work Package 4 of this project a Master-Handbook in English for training farmers was elaborated. The content of this Master-Handbook includes all issues for setting up and maintaining biogas plants. It demonstrates technologies for producing and using biogas, which are most promising in Eastern Europe. It also shows how biogas can be used for energy purposes, such as heat and electricity generation, combined heat and power generation (CHP), as well as purification of biogas to biomethane. This handbook enabled conduction of high quality training courses in Work package 5 (training courses for farmers and biogas plant operators). The training course in Slovenia was organized by the project partners – ApE.</p>
Type of education	workshops
Mode of education	Face to face
applicant qualification	/
Scope	BIOGAS
learning description	<p>Trainings for farmers were successfully implemented in February/March 2010 with more than 90 participants in total. Seminar was organised in a week sequence of two days with additional day with a field trip. It was held in two locations; first in Ljubljana at the Agricultural Institute of Slovenia and then with minor changes repeated in Hoče near Maribor at the Faculty of Agriculture and Life Sciences.</p> <p>Trainings were carried out on 23th February and 2nd March in Ljubljana and 9th and 16th March in Hoče near Maribor (two two-day seminars). The field trip was organised on Saturday 20th March (together for both groups). Seminars were free of charge.</p> <p>The contents were designed with a purpose in mind to make presentation as broad as possible; from theoretical knowledge about the anaerobic digestion and biogas plant to practical experiences of the plant operators, from regulation to communication guidelines for the future investors and developers. As a basics served Big East handbook and tools which was then complemented with the (already existing) presentations of the</p>

	experts (ranging from university professors to experienced plant operators and developers. Also for this reason the seminars were not exact copies one of another. At the Faculty for agriculture and life sciences for example there was a presentation of the PhD thesis (just to be submitted) made at the very faculty. It was about potentially very useful model for feedstock/biogas calculation in combination with other farming planning such as fertilizing plan.
certification description	/
potential utilization	/
evaluation by the participants	<p>Participants were invited to fill in a questionnaire. 60% of them heard about seminar because personal invitation. Main reason (30% of the participants) for participation was general interest in biogas and general interest in renewable energies. 15% of the participant came because of their interest in climate protection and interest in environmental protection.</p> <p>The third question was used to determine what expectations were met and what they produced in relation to its own expectations. <i>Expectations were met</i>, because - quote: got a lot of useful information that will be useful in practice, learned the entire process of biogas production in practice, praised the quality of lecturers, organization and issues, presented were all the elements of biogas production (technology, input devices) and their use (electricity and heat), gained basic information regarding the guidelines, regulations, directives in this field, given were initial information on the biogas plant and complete all pending works, most speakers presented their work (content) in plain and clear pronunciation and were willing to answer questions, satisfied their expectations. Why training did <i>NOT meet their expectations</i> - quote: in the part, when presented Environmental regulations there was no representative from ARSO (Environmental Agency of the Republic of Slovenia) to answer questions about this issue, there were no presentation handouts available.</p>

Name of the institution	Agricultural Institute of Slovenia
Name of studies	
Address	Hacquetova ulica 17, 1000 Ljubljana
Phone	00386 (0)1 28 05 262
Fax	00386 (0)1 28 05 255
e-mail address	info@kis.si
Web page	www.kis.si , www.biogasregions.org
Brief description of the institution	<p>Agricultural Institute of Slovenia is a public research institution founded in 1898. Its present founder is the Government of the Republic of Slovenia. Its foundation rights are asserted through the representatives of the Ministry of Education, Science and Sport and Ministry of Agriculture, Forestry and Food on the Board of Directors.</p> <p>The status of a public research institution implies a governmental non-profit making institution with defined activities in the sense of public service. In frame of its registered activity the Institute carries out the following tasks:</p> <ul style="list-style-type: none"> Basic, applied and developmental investigations, Expert projects defined by laws, Advising, studies and laboratory service, Supervision and verification of quality of agricultural products and products used for agriculture, Publication of findings and results of research, expert and control work. <p>Institute is organised in the following departments: Crop and Seed Science Department, Fruit and Vine Growing Department, Animal Science Department, Plant Protection Department, Agricultural Engineering Department, Agricultural Economics Department, Central</p>

	<p>Laboratories (Agrochemical and Oenological Laboratories). Agricultural Engineering Department is cooperating in different European founded project in the field of biogas. One project is Biogas Regions, project financed form Intelligent Energy Europe Programme. Project duration was from 2001-2010. The work started with a compilation of the framework conditions in the seven developing regions. A strategic action plan was elaborated to show key decision makers how to overcome barriers (WP2). A strong accent has been set on awareness raising and training activities aimed at the regional key players and stakeholders (i.e. brochure, electronic newsletters, study tours, information seminars) (WP3). Positive investment decisions have been prepared in each region by opportunity and decision preparing studies with the support from the experienced partners (WP4). A match-making procedure between potential investors and suppliers of turnkey plants to the seven emerging markets will further advance the process (WP5). The regional key stakeholders were closely associated through advisory committees (WP5). One of the activities of the project were training and raising awareness.</p>
Type of education	workshops
Mode of education	Face to face
applicant qualification	No qualification needed. Participants ranged from farmers to students, from ministry's representatives to potential and actual plant operators.
Scope	BIOGAS
learning description	<p>In 2009 Slovenian partner organized three seminars in which participated 153 participations and in 2010 two seminars were organized (157 participants).</p> <p>Seminar 1 and 2 - first a brief overview of Biogas Regions project, and then followed the professional contributions of biogas. Dr. Jejčič he lectured on the potential of biogas production in agriculture and on biogas technologies, MSc. Poje lectures on the state and future of biogas in Slovenia, substrates for the production of biogas and on support for electricity produced from biogas. After the lectures followed presentations by suppliers of components, new technologies and services in the field of biogas.</p> <p>Seminar 3 - possibilities of biogas production and its use; situation in the field of agricultural biogas plants in Slovenia, presentation of new Regulation on support for electricity produced from renewable sources (biogas); presentation of possibilities fertilization with fermentation residues according to their quality; lecture on atmospheric emissions of biogas plants; lecture on the starting substrate for biogas production and factors affecting the successful formation of biogas. At the end of lectures followed presentations by domestic producers and sellers.</p> <p>Seminar 4 – presentation of the feasibility studies of two biogas plants; presentation of the agricultural potential of biogas production in the future. At the end of lectures followed presentations by domestic producers and sellers.</p> <p>Seminar 5 – presentation of production, processing and use of wood for energy purposes, which is an economic opportunity for forest owners; situation in the field of biogas plants in Slovenia; biomethane; presentation of the necessary environmental permits; presentation of substrates for biogas production; lectures on the technologies of biogas production; presentation of biogas plant KOTO. After the seminar followed field trip to biogas plant KOTO.</p>
certification description	/
potential utilization	/
evaluation by the participants	/

Name of the institution	Energap – Energy agency of Podravje
Name of studies	Conference on the use of compressed natural gas and biogas in vehicles
Address	Smetanova 31, 2000 Maribor
Phone	00386 (0)1 234 23 60
Fax	00386 (0)1 234 23 61
e-mail address	info@energap.si
Web page	www.energap.si , www.madegascar.eu
Brief description of the institution	<p>Local energy agency was established in June 2006 and is cofinanced by European Commission programme Intelligent Energy Europe. EnergaP covers the area of Municipality of Maribor and 15 smaller municipalities in Podravje region together around 180.000 inhabitants. They support the introduction of good energy management practices, advocate the concept of sustainability, provide information and guidance, and offer a number of other local services based on specific local energy needs. They operate impartially on both energy demand and supply issues and reflect the local situations, economic and social circumstances and the geographical size of the relevant local area. They provide:</p> <ul style="list-style-type: none"> Information, advice and training on energy management issues, Support for the implementation of local/regional energy plans, Energy audits of public and private buildings, Raising awareness on energy efficiency, renewable energy sources and transport issues, Search for energy-management incentive funds at national and international level. <p>They are involved in several local, national and EU financed projects. Project dealing with biogas is Madegascar – Introduction of the natural gas and biogas in the cars.</p> <p>MADEGASCAR (Market development for gas driven cars) has been a project operating from September 2007 to February 2010, funded by the IEE programme. The project aimed at developing the market for gas driven vehicles – natural gas and biomethane fuelled vehicles – with the overall goal to increase the number of energy efficient and alternative fuelled vehicles in European countries. The project addressed existing barriers by creating more acceptance on the consumer side, educating fleet owners as well as car dealers, incentive programmes and by awareness raising and information activities. On the other side activities for a better supply infrastructure (fuel stations) and market structure, including the integration of biogas, have been carried out. Energap has with cooperation with Chamber of Commerce and Industry of Slovenia organized <i>Conference on the use of compressed natural gas and biogas in vehicles</i>.</p>
Type of education	conference
Mode of education	Face to face
applicant qualification	/
Scope	BIOGAS
learning description	Conference lasted one day. Next subjects were introduced: Introduction of legislation, strategies and documents the use of compressed natural gas (CNG) and biogas in vehicles; Examples of good practice which were presented by speakers from Austria, Sweden, Czech Republic, Spain and Slovenia; The future use of compressed natural gas (CNG) and biogas in vehicles in Slovenia.
certification description	No certificate
potential utilization	/
evaluation by the participants	/

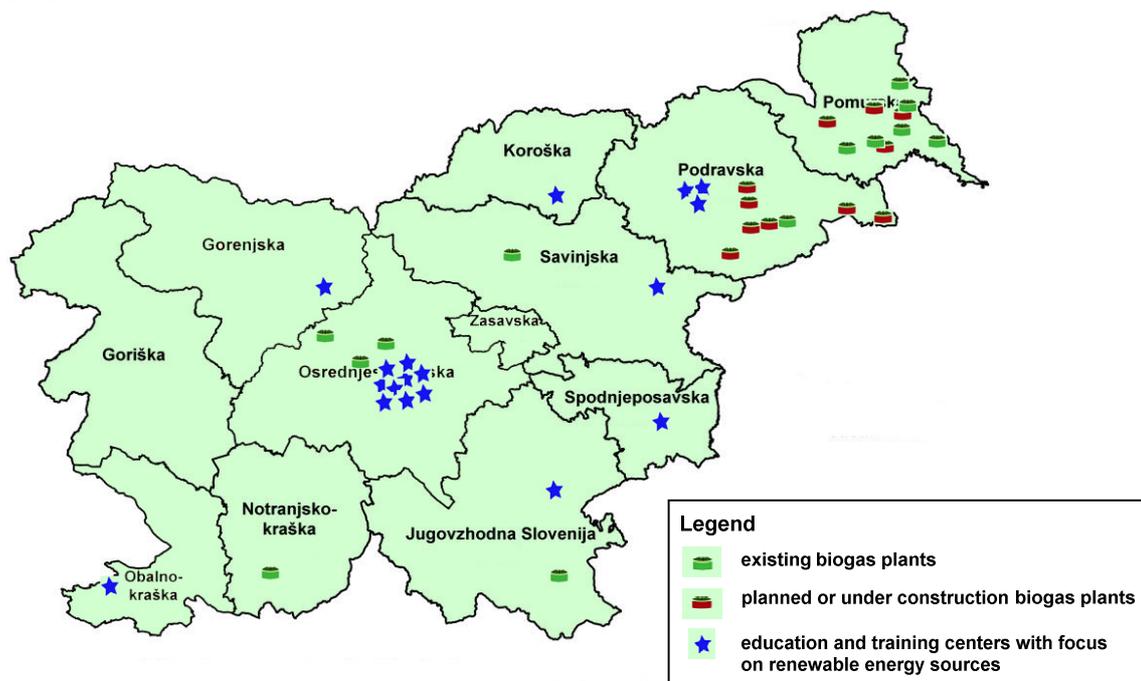
Name of the institution	Energy Agency of Savinjska, Šaleška and Koroška Region (KSSENA)
Name of studies	Biogas – Sustainable energy challenge
Address	Koroška 37a, 3320 Velenje
Phone	00386 (0)3 8961 520
Fax	00386 (0)3 8961 522
e-mail address	info@kssena.velenje.eu
Web page	www.kssena.si
Brief description of the institution	<p>Energy Agency of Savinjska, Šaleška and Koroška region (KSSENA) was established in the framework of “Establishment of local or regional energy Agencies” within the European programme Intelligent Energy Europe (IEE) which is related to horizontal action 2 “Think globally, act locally”. They work in different working fields: energy concepts, energy management, project work, communication with public and educational and other events.</p> <p>KSSENA is accelerating promotion and implementation of measures in fields of renewable energy sources, energy efficiency and sustainable city transport. With their programme and development they are following aims of national and European energy policy in benefit of social, economical and environmental development on local level.</p>
Type of education	conference
Mode of education	Face to face
applicant qualification	/
Scope	BIOGAS
learning description	Conference lasted one day (28 th November 2008). Next lectures were presented: Providing appropriate conditions for the use of animal by-products in biogas plants; Over viewing conditions for the installation of biogas plants; Potential for biogas production in agriculture; Economy of biogas plants; Risk of explosion; Changes to the scheme for promotion of production of electricity from renewable energy sources; Production and use of biogas on the central wastewater treatment plant for Šaleška Valley; Anaerobic treatment of farm Ihan; Presentation of the project Biogas plant KOTO; Alternative sources for transport fuels: natural gas or biogas.
certification description	/
potential utilization	/
evaluation by the participants	/

Name of the institution	Slovenski E- forum
Name of studies	Biogas - a green source of renewable energy
Address	Trubarjeva cesta 50, 1101 Ljubljana
Phone	00386 (0)1 436 41 44
Fax	00386 (0)590 71 321
e-mail address	info@se-f.si
Web page	www.se-f.si
Brief description of the institution	<p>Slovenski E-Forum (SE-F) is a non for a profit public NGO society established in 1993 by a group of concerned scientists and activists in the field of energy policy, energy modelling, integral resource planning, demand side management, renewable energy, energy conservation, economic instruments of environmental protection, public participation etc. Plurality and interdisciplinary are enabling holistic and balanced treatment of issues under question. SE-F is striving for quality energy services like adequate temperature and illumination of living and work spaces, modern electronic communication services and entertainment, use of human labour compensating machines and transport vehicles etc. that will be affordable to all the people. We believe however that those services can be provided in a sustainable, environmental and consumer's friendly manner by more responsible handling with energy by both domestic and industrial consumers as well as by internalization of external costs of</p>

	energy use in a form of environmental tax reform, more energy effective commercial energy services at all levels and support to increased use of renewable energy respectively those energy stocks and technologies that have less harmful effects on the environment per unit of delivered energy service.
Type of education	Series of expert workshops
Mode of education	Face to face
applicant qualification	/
Scope	BIOGAS
learning description	They organized 4 one-day workshops in different locations around Slovenia. At the workshops, participants learned the basics about production and use of biogas, the fundamentals of the economics of biogas plants, basic veterinary-sanitary and environmental regulations in the handling of incoming and outgoing materials, and the possibility of obtaining loans from the Environmental Development Fund of the Republic of Slovenia.
certification description	/
potential utilization	/
evaluation by the participants	/

4. EDUCATION IN REGIONS

Figure 4-1: Regions of Slovenia with biogas infrastructure and educational capacities with focus on RES



The map shows regions of Slovenia and education and training centres with focus on renewable energy sources (and some on biogas) together with existing and planned biogas plants. Most of education and training centres are located in two biggest cities of Slovenia – Ljubljana (Osrednjeslovenska Region) and Maribor (Podravska region) where also two biggest

universities are located. Five Slovenian regions (Obalno-kraška Region, Gorenjska Region, Jugovzhodna Slovenija Region, Savinjska Region, Koroška Region) has each one centre. Locations of educational centres are not connected with location of biogas plants, because most of biogas plants are located in Podravska region and Pomurje Region and most of educational and training centres with focus on RES are located in the biggest educational centres in the country.

5. SPECIFIC ASPECTS

5.1. Country characteristics

After Slovenia joined the European Union a lot has changed on biogas production in the country. Import of the technology, equipment and materials is a simple task now. Because of the (EU) regulation on the waste, food production and environmental protection also the number and quantity of substrates is raising considerably. In the last years Slovenia is facing a rapid development of the biogas plants, which allow for more efficient biogas production and the raising price of fossil fuels is only another supporting factor for increased use.

In Slovenia there are currently 12 biogas with a total power of 14.7 megawatts serving more than 40,000 households. According to analysis made by Agricultural Forestry Chamber, Slovenia has enough potential to make (in the most conservative scenario) 86 megawatts from biogas plants, and with the best scenario as much as 147 megawatts, without substantially interfering with primary agricultural production. This would enable enough electricity to be supplied to more than 319,000 households. The largest agricultural potential for biogas production in Slovenia is the Pomurska and Podravska regions, followed by Central, Savinjska and Gorenjska regions.

5.2. Summary of Positive Aspects

Education in Slovenia is well established. Education at all levels (primary, secondary and tertiary) is available to all citizens as it is financed by the state. Universities and colleges are located in most regions of the Slovenia, which is also one positive aspect.

Several Slovenian institutions are engaged in renewable energy sources (governmental, faculties, research institutes, agencies, associations ...), which means great potential for further development of education in this field.

Slovenian institutions are involved in numerous biogas projects, which are financed from the different EU programs. And in the context of these projects various workshops, seminars and conferences on the topic of biogas for different target groups are organized throughout the country.

5.3. Summary of Negative Aspects

Development of biogas plants is in early stage in Slovenia and that is why there is a lack of knowledge and experience on this field. This is the main reason that biogas is a rare topic in formal education programmes. Biogas is mentioned only in the courses about renewable energy sources. We couldn't find any education programme about research and development of biogas technologies and this is a consequence of not well developed R&D on biogas in Slovenia.

Another negative aspect is also negative public opinion on biogas plants. This shows that people do not know enough about biogas. Public acceptance should be raised by organizing more events (seminars, workshops, conferences) on subject of biogas.

6. REFERENCES

- /1/ www.mss.gov.si - Ministry of Education and Sport
- /2/ www.mvzt.gov.si - Ministry of Higher Education, Science and Technology
- /3/ www.stat.si – Statistical Office of the Republic of Slovenia
- /4/ <http://www.cmepius.si> - Centre of the Republic of Slovenia for Mobility and European Educational and Training Programmes
- /5/ Vehovar Vasja, The Development of eServices in an Enlarged EU: eLearning in Slovenia
- /6/ www.univerzazatretjeobd-drustvo.si

ANNEX

Annex 1: Contacts for further information 40

Annex 1: Contacts for further information

Ministry of Education and Sport	
Address	Masarykova 16, SI-1000 Ljubljana
Telephone	+386 1 400 5400
Fax	+386 1 400 5329
e-mail	gp.mss@gov.si
website	www.mss.gov.si

Ministry of Higher Education, Science and Technology	
Address	Kotnikova 38, SI-1000 Ljubljana
Telephone	+386 1 478 4600
Fax	+386 1 478 4719
e-mail	gp.mvzt@gov.si
website	www.mvzt.gov.si

University of Ljubljana	
Address	Kongresni trg 12, SI-1000 Ljubljana
Telephone	+386 1 241 85 00
Fax	+386 1 241 86 60
e-mail	rektorat@uni-lj.si
website	www.uni-lj.si

University of Maribor	
Address	Slomškovo trg 15, SI-2000 Maribor
Telephone	+386 2 23 55 280
Fax	+386 2 23 55 211
e-mail	rektorat@uni-mb.si
website	www.uni-mb.si

University of Primorska	
Address	Titov trg 4, SI-6000 Koper
Telephone	+386 5 61 17 500
Fax	+386 5 61 17 530
e-mail	info@upr.si
website	www.upr.si

University of Nova Gorica	
Address	Vipavska c. 13, Rožna Dolina, SI-5000 Nova Gorica
Telephone	+386 5 3315 223
Fax	+386 5 3315 224
e-mail	info@ung.si
website	www.ung.si

National Education Institute of The Republic of Slovenia	
Address	Poljanska cesta 28, SI-1000 Ljubljana
Telephone	+386 1 300 51 00
Fax	+386 1 300 51 99
e-mail	info.zrssi@zrss.si
website	www.zrss.si

Slovenian Institute for Adult Education	
Address	Šmartinska cesta 134a, SI-1000 Ljubljana
Telephone	+386 1 5842 560
Fax	+386 1 5842 550
e-mail	info@acs.si
website	www.siae.si

Institute of the Republic of Slovenia for Vocational Education and Training	
Address	Ob železnici 16, SI-1000 Ljubljana
Telephone	+386 1 58 64 200
Fax	+386 1 54 22 045
e-mail	info@cpi.si
website	www.cpi.si