



Development of Training Network for Improving Education in Energy Efficiency (Energy)

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Erasmus+ augstākās izglītības starptautiskās sadarbības iespējas 2015.gada konkursa ietvaros
15th December 2014



Short description

- ✓ Project title:
 - “Development of Training Network for Improving Education in Energy Efficiency” (Energy)
 - „Apmācības tīkla izveidošana energoefektivitātes izglītības attīstībai”
- ✓ Project implementation: 15th October 2012 – 14th October 2015
- ✓ Participants 14 partners from 9 countries
- ✓ RTU is a Leading partner
- ✓ The project total budget: 1 440 049 euro, EU funding 90%
- ✓ The target: *“To enhance networking among higher education institutions across the Partner Countries and EU Member States for improving the education in the field of the energy efficiency enhancement, energy saving and use of renewable sources of energy”*



Partners

1. RTU - Riga Technical University
2. TUT - Tallinn University of Technology
3. VU - Vilnius University
4. LUT - Lublin University of Technology (Poland)
5. KTU - The Koszalin University of Technology (Poland)
6. KU Leuven Kulab ReMI Research Group Brugge-Oostende (Belgium)
7. UDJG - "Dunarea de Jos" University of Galati (Romania)
8. KHAZAR - Khazar University (Azerbaijan)
9. QU - Qafqaz University (Azerbaijan)
10. NAA - National Aviation Academy of Azerbaijan
11. BSU - Belarusian State University
12. BNTU - Belarusian National Technical University
13. BSATU - Belarussian State Agrarian Technical University
14. UPKM - University of Pristina in Kosovska Mitrovica



Objectives

- ✓ To enhance the quality and relevance of higher education in the **partner countries** in the field of the **energy efficiency enhancement, energy saving and use of renewable sources of energy**
- ✓ To make compatible/unified curricula for improving the education and expertise of students and academic staff
- ✓ To confirm teaching/learning approaches (lectures, practice classes, didactic materials, etc.) and tools (equipment hardware /software, user guides) for improving education and expertise
- ✓ To test course materials during 1 year teaching
- ✓ To create Electronic Libraries
- ✓ To start accreditation process on compatible curricula for partners
- ✓ To enhance networking among higher education institutions across the Partner Countries and EU Member States for improving the education



Motivation

- ✓ Involvement into Bologna process, recognition of curricula
- ✓ New equipment for laboratories
- ✓ Opportunity to travel and create network of researchers
- ✓ Additional salaries for teachers, interpreters and professionals

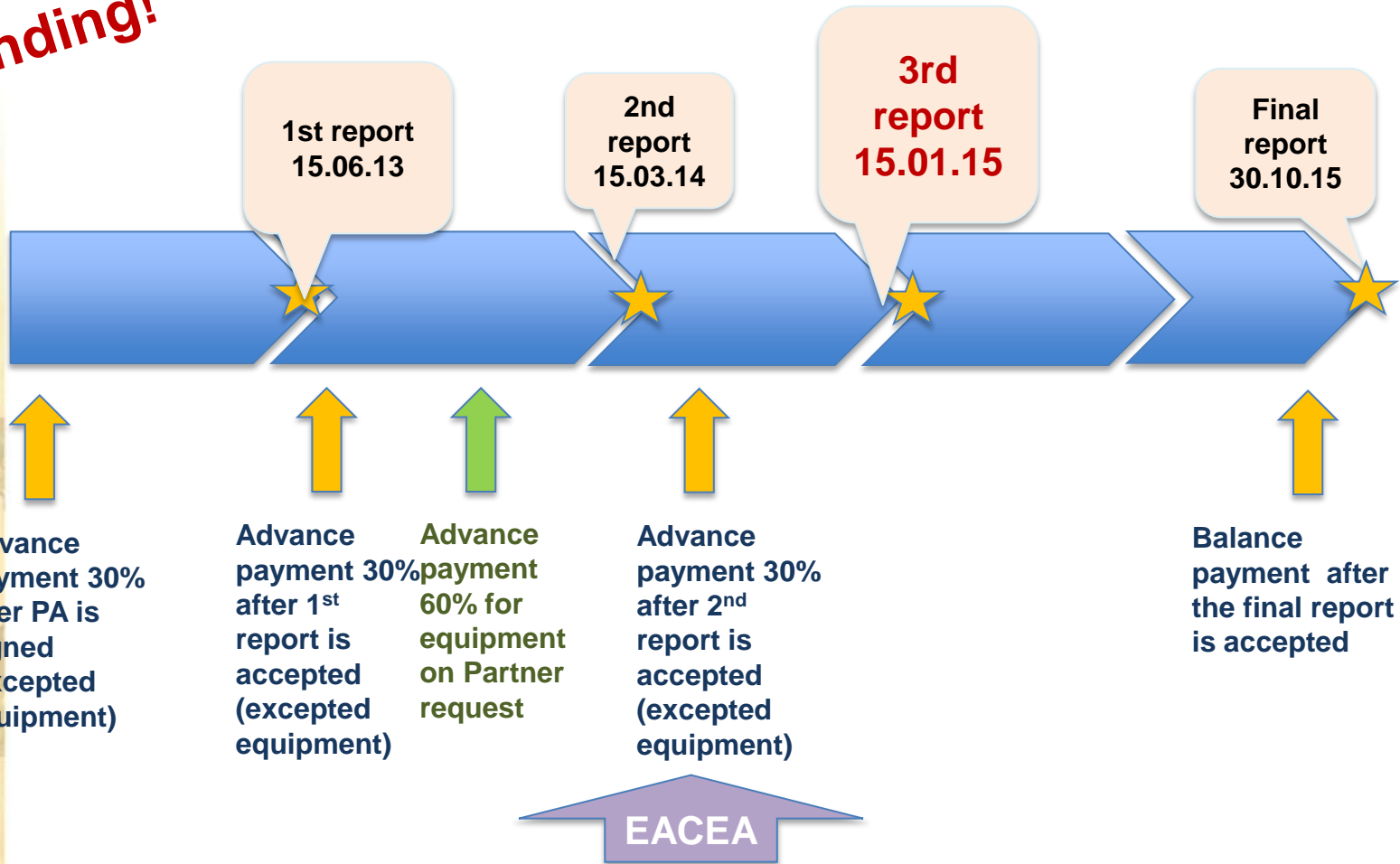


Monitoring, Management & Finance Management



Reporting & Progress monitoring

Finding!



Reporting schedule

No deliver.	Deliverables - reports	Time	RTU	EU partners	Non EU partners
	Financial report	According to PA 4 times	Yes	Yes	Yes
	Activities report	According to PA 4 times	Yes	Yes	Yes
1	Management, coordination and communication report	According to GA 4 times	Yes	No	No
1.4	Double-sided agreements for cooperation:	During the project	Yes	Yes	Yes
6.2	Ex Ante Evaluation Report	15.05.2013	Yes	Yes	Yes
6.3	Regular Monitoring Report- is used for elaboration of 6.3; 2; 1.	Before each MC meeting	Yes	Yes	Yes
6.4	Interim Evaluation Report	Before each MC meeting (consolidated)	Yes	No	No
2	Development of conformed and compatible/unified curricula report	15.03.2014. 14.10.2015.	Yes (consolidated)	No	No
4	Testing report regarding testing: feedback from student parliaments, teaching staff, and administration. Attendees lists (students, teachers).	14.10.2015.	Yes (consolidated)	no	yes
5	Sharing and networking report. Attendees lists (students, teachers)	14.10.2015.	Yes (consolidated)	Yes	yes

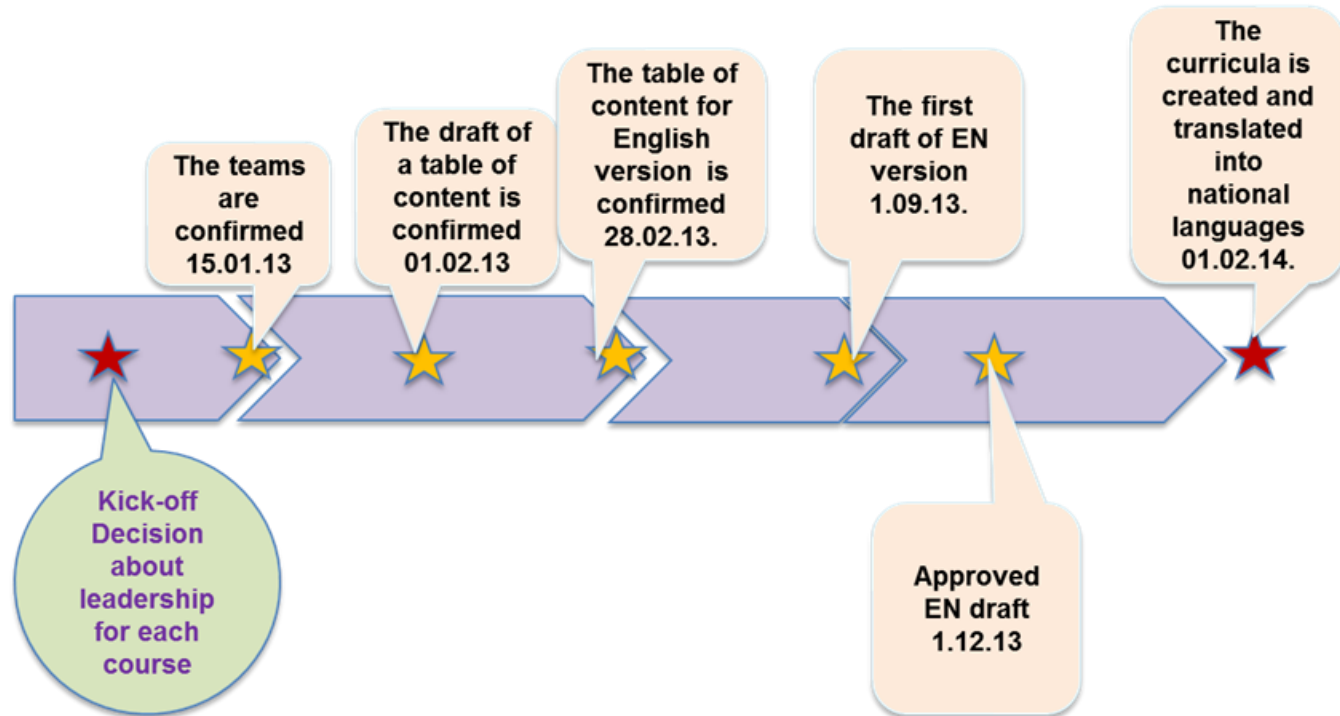


Course books – English version

Finding!

1. Distribution of power energy KU Leuven *Joan Peuteman*
2. Wind energy – KU Leuven *Joan Peuteman*
3. Energy effective materials Lublin TU *Pawel Zhukowski*
4. Heat pumps – UDJG *Ion V Ion*
5. Solar energy and photovoltaic – VTU *Vincas Tamosiunas*
6. Effective lightening - RTU *Ansis Avotiņš*
7. Energy saving Technologies - RTU *Anastasija Zhiravecka*
8. Power Electronics – RTU *Leonids Ribickis*
9. Gas and Hydrodynamics – RTU *Roberts Neilands*
10. Hydrogen energy – RTU, *Oskars Krievs, Ingars Steks*

Course books – English version



Team work on courses elaboration

- RTU - Riga Technical University
- LTU - Lublin University of Technology
- KTU - Koszalin University of Technology
- KU Leuven - University Brugge-Oostende
- KHAZAR - Khazar University
- QU - Qafqaz University
- BSU - Belarusian State University
- UPKM - University of Pristina in Kosovska Mitrovica

Energy saving technologies – RTU

19 authors!

- KHAZAR - Khazar University
- QU - Qafqaz University
- NAA - National Aviation Academy of Azerbaijan
- BSU - Belarusian State University

Gas- and Hydrodynamics – RTU

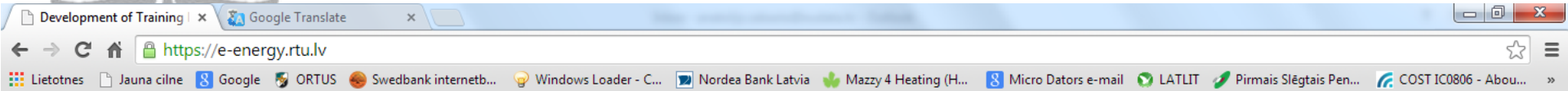


Project progress

- ✓ All partners showed activities – nobody dropped out 😊
- ✓ Nine WS have been held in Minsk-1, Galati, Baku and Minsk-2
- ✓ 2nd Finance Report was prepared by all partners
- ✓ **First audit** of expenses made by partners is implemented
- ✓ Elaboration of the course books and labs is approaching to the finish, however appears delay



E-library



Development of Training Network for Improving Education in Energy Efficiency

You are not logged in. (Login)

English (en)

Home

Navigation

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Courses

RTU

- [Wind energy](#)
- [Hydrogen energy](#)
- [Solar energy and photovoltaics](#)
- [Energy saving technologies](#)
- [Effective lightening](#)
- [Power electronics](#)
- [Gas- and Hydrodynamics](#)

TTU

- [Distribution of power energy](#)

VU

- [Solar energy and photovoltaics](#)
- [Effective lightening](#)

LUT

- [Energy saving technologies](#)
- [Solar energy and photovoltaics](#)
- [Energy effective materials](#)

KTU

- [Energy effective materials](#)
- [Solar energy and photovoltaics](#)
- [Energy saving technologies](#)
- [Heat pumps](#)

KHBO

- [Wind energy](#)
- [Hydrogen energy](#)
- [Solar energy and photovoltaics](#)
- [Energy effective materials](#)

Recommended links

[PROJECT DOCUMENTATION](#)

Calendar

May 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Main menu

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- [Общая техническая инструкция](#)





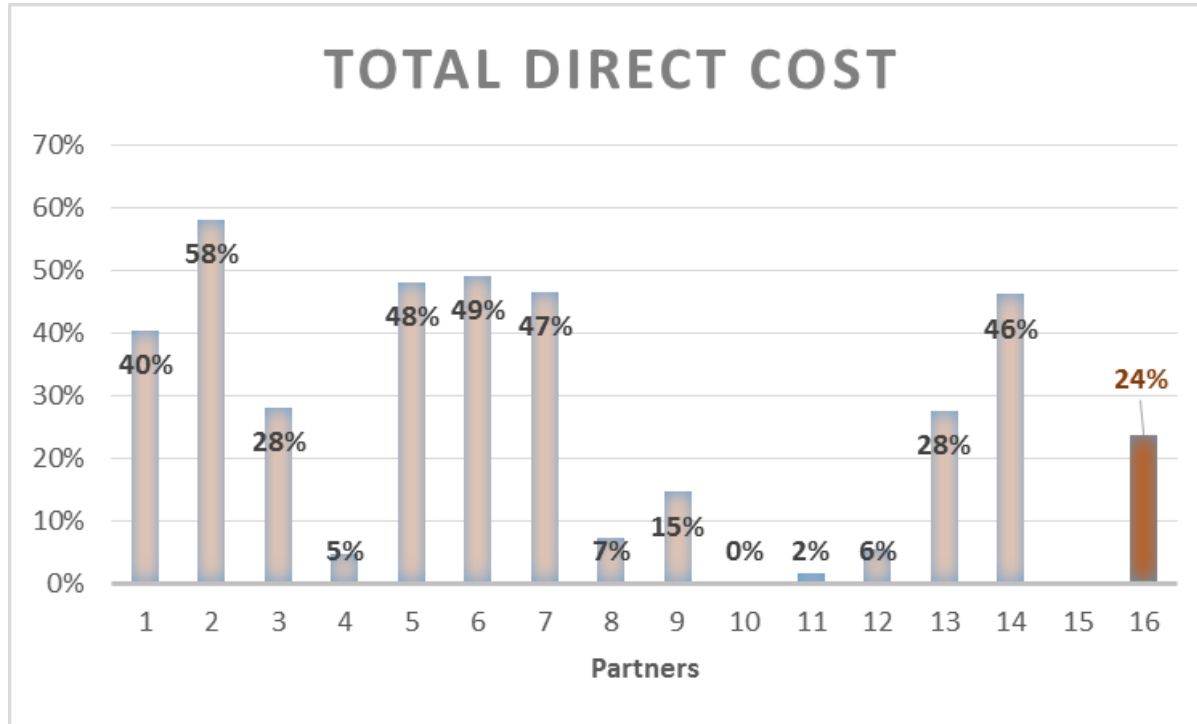
2nd Financial Report

Reports - are submitted by all partners!

Problem issues:

- ✓ Indirect cost should be calculated as 7% of total direct cost
- ✓ Please do not forget co-financing 10%
- ✓ About travel & accommodations: keep your ceiling relating to accommodations (**no minibars!**)
- ✓ Some documents are missed, for example, the cost of airplane tickets
- ✓ Bookkeeping documents, which show salaries paid to staff, also must be sent with Financial report.

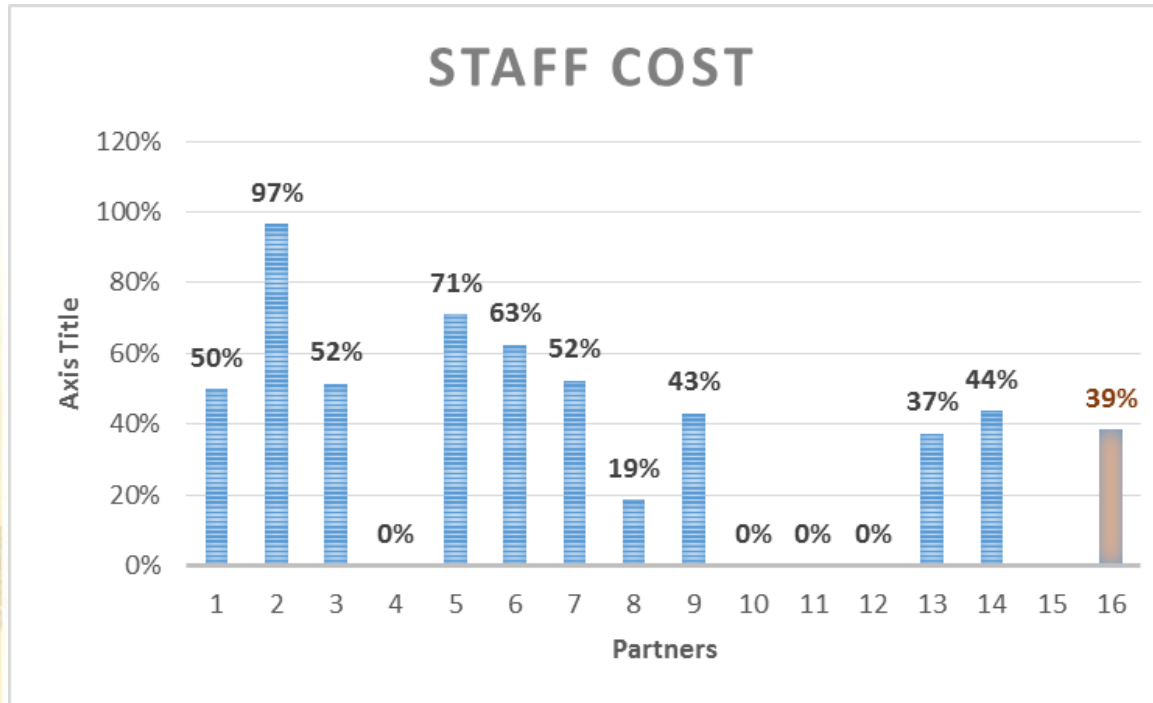
Financial results



Partner Ref. N°	Short name of the organisation
P1	RTU
P2	TTU
P3	VU
P4	LUT
P5	KTU
P6	KHBO
P7	UDJG
P8	KHAZAR
P9	QU
P10	NAA
P11	BSU
P12	BNTU
P13	BSATU
P14	UPKM

- Slow budget acquisition – 24%
- EU partners fulfilled a large part of the tasks
- UPKM purchased equipment
- Belorussian partners delay purchase of equipment

Financial results



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- For partners did not pay to its staff
- TTU almost spent all budget

Implementation & testing

Outputs and Outcomes

- ✓ Student attraction
- ✓ 1 year testing

Indicators of a progress

- ✓ Number of students benefited from project
- ✓ Feed-back forms from students by subjects;
- ✓ Results of final testing by subjects;
- ✓ Feed-back forms from academic /teacher

Measures

- ✓ Administrative reports with attachment of information.
- ✓ Attendance list

✓ Deliverable 4: Testing report

- ✓ each **partner** university will report regarding testing: feedback from student parliaments, teaching staff, and administration. Attendees lists (students, teachers).
- ✓ Activities Reports by **15th January 2014**: submit a description of courses to be tested
- ✓ Methods for evaluation of feedback have been created

Obstacles

- ✓ Bureaucracy:
 - 13 month passed for approval of MK to have budget in Euros
 - 3 month to get budget approval of Ministry of Economics
 - Advance to non-Belorussian supplier is prohibited
 - Day salary is several times lower than accepted by TEMPUS rules
- ✓ Lack of experience in international projects:
 - Co-financing
 - Tenders
 - Salary payments
- ✓ Cultural awareness differs among partners
 - Time schedule – different perception among different cultures
 - Home authorities are higher than EU
 - Ignorance of promises and requests
 - Personal relationships
 - Knowledge of languages ☺



Beyond the project

- ✓ Bilateral agreements and Erasmus agreements
- ✓ Plans to develop a project with some of the partners
- ✓ Personal / professional relationships with the colleagues from the consortium
- ✓ RTU prepared for issue 5 course books for foreign students teaching
- ✓ New 5 courses will be started next year
- ✓ Experience obtained in international project



Questions?

<http://energy.rtu.lv/>

RTU PROJECT TEAM



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