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No half measures

Investment needs in energy efficiency and renewables in the CEE countries

Author

Ondřej Pašek, Czech Republic

Contributors

Anna Drazkiewicz, Poland
Laszlo Fazekas, Hungary
Genady Kondarev, Bulgaria
Miroslav Mojžiš, Slovakia
Alda Ozola, Latvia

Editing

Greig Aitken

Design

Ondřej Pašek

Cover photo

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Executive summary

Total investments necessary to utilise the potential for energy efficiency and renewable sources in seven analysed CEE countries amount to EUR 24.626 billion anually, totalling EUR 172.382 billion in the 2014–2020 period. According to the European Commission proposals on Cohesion policy and the Multi-Annual Financial Framework, EUR 30.83 billion will be earmarked for climate change objectives, especially energy efficiency and renewable energy sources (RES) in the period 2014–2020.

Given the disparity between the investment needs and the public funding currently proposed for energy efficiency and RES in the Cohesion policy proposals, there is no manoeuvring space for cutting down the amounts earmarked for EE and RES, even though Cohesion and Structural Funds will not be the only source of public financing for such measures. We see many reasons to substantially increase funding into these areas, not only because of their contribution to the EU climate and energy targets, but especially because of the extraordinary employment and economic benefits that these measures can provide.

Many of the investments in energy efficiency and RES bring very high positive impacts on employment as well as on the territorial distribution of these jobs, on the involvement of small and middle sized enterprises and leverage of private funding. In particular, the high labour intensity of a widespread deep energy retrofit of buildings makes public financing in this area one of the most powerful measures that can be used to ensure economic recovery.

Introduction

This analysis of investment needs in energy efficiency (EE) and renewable energy sources (RES) from CEE Bankwatch Network and Friends of the Earth Europe adds to the ongoing discussion on the financing of the transition to a low-carbon economy and its effect on employment and regional development.

We have analysed over 20 different EU, governmental, academic, NGO or expert sources that list the investment needs in seven new member states: Bulgaria, the Czech Republic, Hungary, Latvia, Poland, Slovakia and Slovenia. Although the methodologies and scopes of these studies differ, we have attempted to summarise their conclusions into amounts of annual investment needs in the areas covered by the different sources in the countries. We lay out the main conclusions, both on the investments and their accompanying economic benefits, in the form of country profiles in the second part of this paper.

In the first part we have totalled the investment needs of the different countries and we provide a comparison with the amounts currently earmarked for low-carbon economy, EE and RES in the European Commission proposals on Cohesion policy and the Multi-annual Financial Framework. Although this comparison does not take into account many complex issues and is limited in its geographical scope, it allows us to come to some conclusions. These conclusions provide an interesting perspective for assessing the current debate about the next financial period 2014-2020.

Investment needs and public funding in energy efficiency and renewable sources

Total investment needs in seven new member states

Starting with an analysis of available sources on the financing needs in energy efficiency (EE) and renewable sources (RES), we have identified individual annual investment needs for each of the countries, as illustrated below in the country profiles. Summing these annual amounts, we come to the following conclusions: Total investment in EE necessary for the utilisation of the maximum possible EE potential as calculated in the different studies is at least EUR 17.183 billion a year, or EUR 120.281 billion in seven years. For RES, the investment necessary to utilise the potential specified in the source studies amounts to EUR 7.446 billion annually or EUR 52.101 billion in seven years.

7 CEE countries	Annual investment needs	Investment needs in EUR billion
	Energy efficiency	17,18
	Renewable sources	7,44
	Total annual investments	24,63
	Total investment needs in seven years time	
	Total in 2014 – 2020	**172,38**
	Share of public funds	25%
	Total from public funds in 2014 – 2020	**43,1**

Table 1: Annual, total and public investments in BG, CZ, HU, LV, PL, SK, SI

Investment into EE/RES proposed in the draft Cohesion policy regulation

The current European Commission draft legislative package[1] that will frame cohesion policy for 2014–2020 requires member states to focus the largest part of their European Regional Development Fund (ERDF) and Cohesion Fund (CF) allocations on achieving the priorities of the Europe 2020 strategy for smart, sustainable and inclusive growth:[2] EE and RES, the competitiveness of SMEs and innovation.

For the ERDF, it sets the minimal allocation for the thematic objective of supporting the shift towards a low-carbon economy in all sectors to 20 percent for transitional

and more developed regions, and to 6 percent for less developed regions. For the CF, we take the text of the the Preamble of the common provisions to be indicative: it reiterates the Multi-annual Financial Framework stipulation of devoting at least 20 percent of the EU budget to climate change objectives.

Based on these Commission proposals and forecasts of amounts available for economic, social and territorial cohesion in the Multi-Annual Financial Framework (MFF),[3] we calculate that under ERDF and CF together there will be EUR 30.83 billion available for climate change objectives, especially EE and RES, for the period 2014-2020. In absolute terms, the largest amount will be available for the less developed regions – EUR 7.32 billion from the ERDF.

Fund	Region type	ERDF without ESF share	Share for EE/RES	Amount for EE/ RES in EUR billions
ERDF	Less developed	121,95	6%	7,32
	Transition	23,4	20%	4,68
	More developed	25,49	20%	5,1
		Total CF		
Cohesion Fund		68,7	20%	13,74
Total for EE/RES in both funds				30,83

Table 2: ERDF and Cohesion Fund earmarking for climate change objectives

Comparison of the investment needs and earmarked funds

Summarising the investment needs in seven out of 12 new member states that are primary beneficiaries of Structural and Cohesion Funds (SCF), we conclude that the amount necessary for EE/RES is as high as EUR 172.38 billion. Assuming a leverage ratio of public funds of 1:4 (or 25 percent share of public funding on these investments),[4] we arrive at a figure of EUR 43.1 billion of necessary public investment into EE and RES over seven years in these countries.

SCF will be one of many public financial sources to support this area in the future financial period, but it will be one of the most important ones. Looking at the financing available from SCF in the next budgetary period for all the eligible regions and countries, a figure of EUR 30.83 billion, we can conclude that there is no manoeuvring space for cutting down the amounts earmarked for EE and RES in the current MFF and SCF Commission proposals. The proposed minimal levels are probably not even sufficient to cover the investment needs in EE and RES in as few as seven central and eastern European countries.

The benefits of EE and RES investments for employment and regional development

Many of the analysed studies list not only investment needs, but also the benefits of such investments. Looking at the investments within the context of the current economic crisis and the aims of Cohesion Policy in terms of regional disparity and job creation, we see that many of the investments, especially in EE measures in buildings, deliver very high positive impacts on employment as well as on the territorial distribution of the jobs and on the involvement of small- and medium-sized enterprises.

The construction sector is a sector with high labour intensity and any created jobs cannot be outsourced to other countries, unlike manufacturing jobs for example. Within the construction sector, EE measures in buildings are champions in terms of job creation: "The labour intensity for deep renovations [...] 26 full-time job equivalents (FTE) units per million Euro invested is more than double the average labour intensity of the construction industry – 12 FTE/million EUR."[5]

Other economic benefits of investments into EE and RES are important as well. The Slovak Ministry of Construction and Public Works estimated in 1999[6] that every EUR 1 million invested into the renovation of buildings creates a EUR 530,050 net benefit for the state budget through a EUR 399,948 increase in incomes and a EUR 130,102 decrease in expenditures. Large scale public support for the energy retrofit of buildings is also able to mobilise large amounts of private capital from building owners. Evaluating anti-crisis measures in the Czech Republic, economist Miroslav Zámečník, a member of the Governmental Independent Council on Economy, has said: "I dare to say that from the point of view of the multiplication effect, the contribution of each invested Crown for the national economy, we can find no better incentive than the Green Investment Scheme [investments into energy retrofits of private housing]."[7]

Taking into account all these benefits, we conclude that the public funding currently earmarked for EE and RES in the Cohesion Policy proposals is the very minimum amount. There is a resounding case for substantially increasing funding into these areas, not only because of their contribution to the EU climate and energy targets, but particularly because of the extraordinary employment and economic benefits that they can provide.

Country profiles

Bulgaria

Energy efficiency

The National Renovation Program[8] in Bulgaria has estimated that 680,000 households need to undergo renovation by 2020 with important EE elements, worth EUR 2.13 billion. These would include thermal insulation, renovation of heating systems and the installation of RES. The implementation of the entire Program would employ more than 60,600 workers. Depending on the extent of the Program, the annual number of people employed will vary from 2,000 to 8,000. As a result, over 523,000 tons of CO_2 annually would be saved.

Renewable sources and job opportunities

The Vision for Sustainable Energy,[9] an alternative energy scenario for Bulgaria drawn up by Inforse and Za Zemiata, proposes the installation of 1 million m2 of solar water collectors by 2020. Experience from the Staccato[10] project in Sofia shows that the optimal collector surface covering the needs of hot water in one household is around 2.35 m2; the costs are close to EUR 1750 per household. Such a program would deliver energy for 420,000 households in Bulgaria, providing nearly 1,700 direct job openings for installers and more in the manufacturing industry. The total investment cost for this measure would be approximately EUR 745 million.

BG	Measures	Benefits	Annual investment needs in EUR millions
	Retrofit of 680,000 households	Saving 523 MtCO2 annualy, 60,600 workers	213
	Solar collectors installation for 420,000 households	1,700 jobs plus manufacturing jobs	74,5

Table 3: Measures and annual investment needs in Bulgaria in 2014-2020

Czech Republic

Energy efficiency

A report on the potential energy savings in residential buildings by Porsenna[11] underlines that the technical potential of the savings in the housing sector in 2050 is 142 PJ per year (62 percent of current consumption), while the economic potential is 62.5 PJ per year. To fulfil this potential, investment of EUR 1.84 billion per year is required. The current support level of EUR 0.18 billion limits these savings to 10 percent of the potential. The technical potential in the tertiary sector[12] is 33.4 PJ per year in 2050, requiring approximately EUR 314 million[13] annually.

Renewable sources

The Czech McKinsey report[14] calculates the total yearly costs of 1 tCO_2 emission abatement compared to the business as usual (BAU) scenario for small hydro at EUR -11.3; biomass EUR 59; wind EUR 74 and solar EUR 198. Considering the technical potential of RES, the overall abatement costs compared to BAU amount to EUR 903.04 million per year for these RES alone. The negative abatement cost in the case of small hydro shows that investment in this RES is economically profitable compared to the BAU energy mix with fossil fuels.

CZ	Benefit	Annual savings	Annual investment needs in EUR millions
	Achieving energy efficiency technical potential in residential buildings (in 2050)	141,9 PJ in heat consumption (60% of current consumption)	1804
	Achieving energy efficiency technical potential in terciary sector (in 2050)	33,4 PJ (49% of current consumption)	314
	Achieving 30% of RES in power generation (in 2030)	24 Mt CO2 (53% of reference scen.)	903 above BAU

Table 4: Measures and annual investment needs in the Czech Republic

Job opportunities

A study by economist Miroslav Zámečník[15] on the employment effects of EE retrofitting examined the effects of different programs up to 2010. The Panel programme for energy retrofit of blocks of flats, started in 2001, created on average 6,600 full-time equivalent annual jobs a year with average annual public spending of EUR 53 million. In the 10 years of of the programme's existence, EUR 1.92 billion was invested from private sources, providing retrofitting for 334,000 flats. Another programme, the Green Investment Scheme, was able to stimulate energy retrofitting for 19,000 homes (mostly individual houses) in just 15 months. This scheme involved an average of 12,000 full-time jobs equivalents annually, with average public subsidies of EUR 255 million per year.

Hungary

Energy efficiency

A study by the Central European University[16] on the employment effects of energy retrofit scenarios with different efficiency levels shows that annual investment of EUR 3.4–5 billion into deep energy of buildings in Hungary could, in the most ambitious scenario, reduce CO_2 emissions by 45 percent and save nearly 85 percent of final heating by the end of its implementation (2027–28). a sub-optimal programme would not go further than 40 percent heat savings.

In total, investment of EUR 50.47 billion would deliver energy savings worth as much as EUR 14.13 billion by 2025 and EUR 97 billion by 2050 – i.e., almost double the investment costs. The average annual investment would be EUR 3.4 billion, but in the phasing-in period as much as EUR 5 billion would be necessary, dropping subsequently to EUR 3 billion with the learning curve and market changes.

Renewable sources

The Hungarian National energy strategy[17] to 2030 estimates financial needs for several scenarios. In the extended RES scenario, Hungary would obtain approximately 2600–2700 PJ annually from RES. For this, total investment of EUR 24.78 billion over 40 years is required, with public support for RES of EUR 217 million annually, achieving emission reductions of 10.7 $MtCO_2$ per year by 2030. The Hungarian Renewable Energy Use Action Plan[18] estimates total investment needs for RES, EE and other green economy measures for the period 2010–2020 at approximately EUR 2.454 billion. This would result in annual emissions reductions of 5.65 $MtCO_2$ in 2020, with 51,200 jobs created.

HU	Measures	Benefits	Annual investment needs in EUR million
	Deep energy retrofit of buildings	Entire programme: **energy savings worth EUR 14.13 billion** already in 2025, CO2 emissions reduction 45%, **save 85% of final energy for heating**	3400
	Hungarian National energy strategy 2030	2600-2700 PJ annualy from renewables, emission reduction of **10.7 MtCO2/year** in 2030	2753

Table 5: Measures and annual investment needs in Hungary

Job opportunities

The Central European University study[19] focuses to a large extent on the employment effect of the retrofit measures. It shows that investments into efficiency in buildings creates high volumes of jobs.

Comparing the job creation effect in the construction sector (labour-intensive in itself), the study concludes: "The labour intensity for deep renovations [...] 26 full-time job equivalents (FTE) units per million Euro invested is more than double the labour intensity of the entire construction industry – 12 FTE/million EUR according to KSH (2010d)." (page 104)

The differences in the direct impacts of the various scenarios illustrate qualitative aspects such as the qualifications required by the new positions. The lower amount of total FTE jobs generated per million euros in deep renovation scenarios is explained by the fact that deep retrofits require a higher proportion of professionals (e.g. architects and engineers), and therefore the total number of people involved per amount of money invested is lower: "The findings of this study demonstrate that deep [energy efficiency] renovations are one of the most employment intensive interventions for climate change mitigation or other economic recovery attempts." (page 111)

Particularly interesting from the point view of cohesion is the fact that "[a] programme focusing on the improvement of energy efficiency in the building sector, such as the one studied in the present research, is more likely to have direct, indirect and induced employment impacts distributed throughout the country." (page 119)

Unit: thousands of Full Time Equivalent jobs (FTE)	Baseline	Deep retrofit	Limited uptake retrofit	Suboptimal
Direct impacts in construction sector	8	91	54	31
Total net employment impacts in 2020	11	131	78	43
EUR million invested in 2020	224	3506	2104	1040
FTE per million Euros invested – direct	34	26	26	30
FTE per million Euros invested – indirect	49	37	37	42

Table 6: Employment effects of different energy retrofit scenarios in Hungary. Baseline and 3 scenarios: deep retrofit (S-DEEP1), limited uptake retrofit (S-DEEP2), suboptimal (S-SUB)

Latvia

Energy efficiency

The National Energy Efficiency Action Plan (2011)[20] calculates savings of 2900 GWh cumulatively by 2020, achievable by the thermal insulation of one third of the buildings in the country. An investment of EUR 3 billion over ten years is required to reach this target.

Regarding EE in buildings, an assessment from the Ministry of Economics and the Latvian Union of Municipalities suggests that EUR 2.1–2.6 billion of investment would be necessary in the period up to 2030, of which EUR 0.85 billion would be required in Riga. Annually it would require EUR 114–134 million of investments in order to bring down the average heat energy consumption to 100 kWh/m^2 by 2030. The average heat energy consumption (considering the climate factor) in 2009 was 193 kWh/m^2, thus the savings that can be achieved are in the range of 45–60 percent.

The calculations of estimated investment needs were made by the Ministry of Economics, assuming that it would be cost-efficient to refurbish around 60–70 percent of multi-apartment residential buildings with a total area of 30–35 million m^2, and the average cost for heat insulation at the level of 71 EUR/m^2.

Large scale energy efficiency interventions – district heating

The Guidelines for Energy Sector Development for 2007–2016[21] estimate that a reduction in the energy losses in district heating systems from 17 percent to 14 percent by 2016 would cost approximately EUR 400 million. Adding 52 MW of installed capacity in biomass cogeneration in the existing district heating system would cost another EUR 130 million. Moreover grid lines and power networks need to be upgraded in order to allow a functioning energy market, including enabling the uptake of produced electricity from RES. Estimated investment costs into district heating and transmission lines up to 2030 are approximately EUR 1.5 billion.

LV	Measures	Benefits	Annual investment needs in EUR millions
	Achieving cost-efficient energy efficiency potential in multi-apartment residential buildings by 2030	45-60% of current heat consumption	134
	Increasing of energy efficiency in disctrict heating and upgrading of transmission lines	efficiency of heat generation 80-90%, decrease of losses in district heating systems by 18%	70

Table 7: Measures and investment needs in Latvia

Job opportunities

According to a study done by the Physical Energy Institute, the development of biomass co-generation by 2020 would result in approximately 1,500 direct and indirect jobs.[22] In total, according to a scenario that envisages the reaching of the Latvian national target of 40 percent share of RES by 2020, there would be around 8,500 direct and indirect full time jobs created (approximately equivalent to 11 percent of the people employed in the construction sector) plus additional tax revenues for the government and municipal budgets of EUR 71 million annually. As for the thermal insulation sector, there are estimations that around 30 percent of invested costs return to the state budget indirectly, i.e. through VAT or income tax.

Poland

Energy efficiency

In Poland, a study by McKinsey[23] has shown that emissions reduction measures in buildings would require investment of EUR 24 billion above the BAU scenario by 2030, ultimately resulting in EUR 20.3 billion in energy savings. a report from the Foundation for Energy Efficiency[24] shows that investment of EUR 107 billion in EE in housing, public buildings and buildings of SMEs would bring savings of 50.7 percent of energy and 47 $MtCO_2$ annually, or 40 percent of the total emissions reduction potential of the country in 2020.

The Polish 'white certificate system' covers large scale interventions in EE by energy producers greater than 5 MW and final energy consumers who use more than 400 GWh/year. a study comissioned by Polish Ecological Club[25] based on the data of the National Fund for Protection of the Environment estimates that for the period 2010-2016, the saving of 1.84 Mtoe of energy would cost EUR 9.05 billion under the white certificate system. Projects can include industry installations, the modernisation of buildings, the modernisation of industrial installations, heat grids and plants and others.

Job opportunities and economic benefits of energy efficiency measures

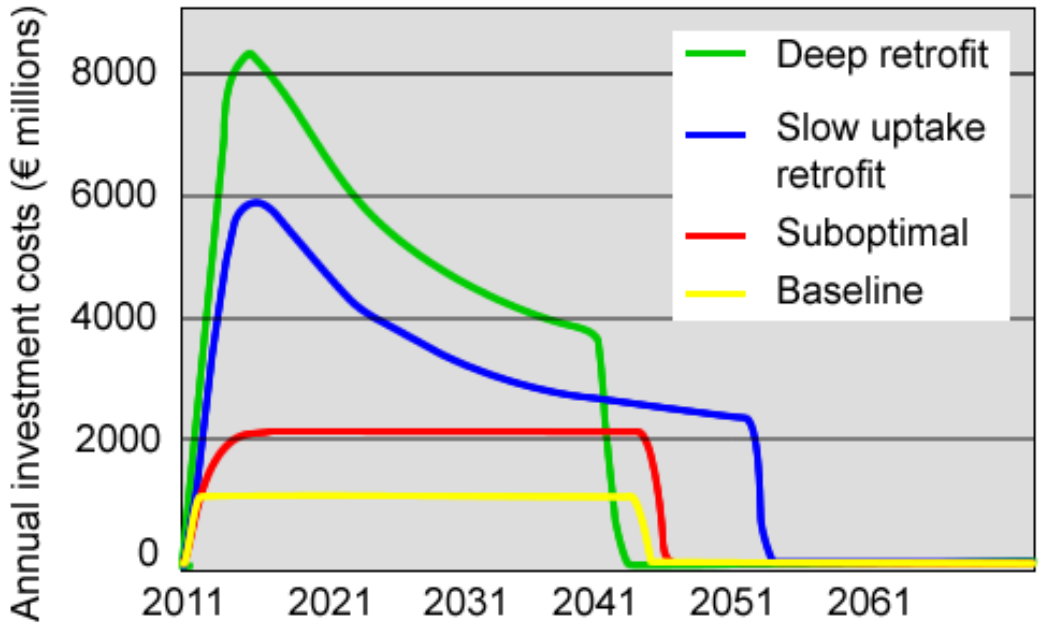
The Central European University study ‚Employment Impacts of a Large-Scale Deep Building Energy Retrofit Programme in Poland'[26] shows again that investments into efficiency in buildings creates high volumes of jobs. Using several scenarios, the study compares investment costs, employment effects and benefits in terms of energy and energy-cost savings.

In the most ambitious scenario, involving the speedy implementation of a deep energy retrofit in 31 years, annual investment of EUR 3.9-8.4 billion is necessary to ensure a retrofit rate of 450,000 – or 3.5 percent – of Polish dwellings

per year. Compared to the other scenarios, the deep retrofit scenario requires increased total costs of EUR 164 billion, but enables the highest energy savings, worth total of EUR 203 billion by 2080. Regarding the comparison of benefits of the different scenarios, the study concludes that: "All in all, these results indicate that in the long-term, the energy saving benefits accrued through retrofits surpass investment costs, and that deep retrofits are preferable [...] Among deep scenarios, a more ambitious retrofit rate delivers more undiscounted net benefits. S-DEEP2 (here called moderate uptake) scenario can be suggested as a rate of retrofit that maximizes net benefits without compromising the feasibility of the programme or creating imbalances in the labour and other markets affected by the retrofits." (page 22)

Unit: thousands of Full Time Equivalent jobs (FTE)	Baseline	Deep retrofit	Slow uptake retrofit	Suboptimal
Direct impacts in construction sector	19	106	76	34
Total net employment impacts in 2020	40	294	210	83
Millions of Euro invested in 2020	1104	6995	4997	1040

Table 8: Employment effects and investment needs in different retrofit scenarios



Graph 1: Annual investment needs in different retrofit scenarios in Poland

Renewable sources

The Polish McKinsey report[27] compares the baseline scenario with a RES and gas scenario which would bring additional emission reductions of 81 $MtCO_2$ per year. The estimated cumulative investment costs on top of the business-as-usual baseline amount to EUR 25 billion by 2030. By that time, Poland will be using installed capacity of 16 GW in wind and 0.89 GW in biomass.

The Institute for Renewable Energy estimates total costs for RES development in Poland at EUR 26.756 billion by 2020[28], including for example EUR 4.896 billion for large wind power, EUR 1.386 billion for offshore wind, EUR 2.521 billion for biomass and EUR 7.897 billion for solar thermal panels.

PL	Measures	Benefits	Annual investment needs in EUR million
	Decrease of GHG emissions generated by buildings	EUR 20.3 billion in energy savings	1 200 above BAU
	Deep energy retrofit of buildings in S-DEEP2 scenario	294 000 FTE jobs, saving € 203 billion in 2080	6995
	Decrease in energy consumption and GHG emissions associated to public and SMEs buildings	50.7% of energy and 47 $MtCO_2$ annually (40% of Polish total emission reduction potential)	10700
	Energy savings achieved under white certificates system	0.26 Mtoe of energy	1290
	Increased share of RES on final energy consumption		2970

Table 9: Measures and annual investment needs in Poland

Slovakia

Energy efficiency

The Ministry of Regional Development[29] estimates that EUR 13.1 billion is needed for the retrofitting of the national housing stock (790,000 dwellings) with energy efficiency elements. In order to achieve this by 2030, 32,500 dwellings per year need to be retrofitted, at a cost of EUR 547.7 million annually. The mid-term evaluation of realising greater EE in buildings from 2011[30] estimates total potential energy savings up to 30-50 percent of current total energy needs of the sector.

Renewable sources

The total estimated investment costs for private enterprises to achieve a 14 percent share of RES in final energy consumption (EU target) are EUR 3.3-4.3 billion over 10 years.[31] As biomass and hydropower will be dominant in these investments, the projects will have to conform with strict environmental criteria. This may lead to lower investment levels if some of the projects are not implemented.

SK	Measures	Benefits	Annual investment needs in EUR million
	Energy savings achieved through EE measures in housing	30% - 50% of current total energy needs of the sector	548
	Achieving 14% of RES in final energy consumption		430

Table 10: Measures and annual investment needs in Slovakia

Job opportunities and fiscal benefits

According to the Slovak government, the building retrofit concept focusing on residential sector from 1999[32] – involving the annual renovation of 10,000 apartments with EE elements – would generate 10,000 jobs a year, based on labour productivity rates from 1999. Wider use of biomass would create an employment effect that could be as high as 18,000 jobs a year. It estimated that every EUR 1 million invested into the renovation of buildings creates a EUR 530,050 net benefit for the state budget through a EUR 399,948 increase in incomes and a EUR 130,102 decrease in expenditures.

Slovenia

Renewable sources

The Slovenian National renewable energy action plan[33] estimates total investments required to achieve the EU RES target of 14 percent at EUR 3.115 billion, with public support of EUR 898 million. These investments will provide for an increase in RES usage of 1237 ktoe in 10 years and create 11,420 jobs in construction and 585 jobs in the running of these installations.

Most of the energy, especially heat, will be produced from biomass, with the highest public support: EUR 285.72 million for electricity and EUR 303.85 million for heat, followed by solar energy with EUR 90 million for photovoltaics and EUR 32 million for solar heat. The foreseen GHG emissions reduction amounts to 1, 636 $ktCO_2$/ year.

SI	Measures	Benefits	Annual investment needs in EUR millions
	Achieving RES share set in National renewable energy action plan	**Energy from RES 1131 ktoe / year, 11420 FTE annual jobs by 2020 in construction**	**312**

Table 11: Measures and annual investment needs in Slovenia

Methodological limitations of this summary

We are well aware of the limited number of studies that have been taken into account and even more so of the incomparable methodologies, data sources, time periods and other assumptions on which the results of the studies are based. We therefore do not present this paper as a definitive calculation of given investment needs, but rather as a summary of existing estimates. It is thus a contribution to the ongoing discussion on these investments and the contribution of public finance, especially EU Structural and Cohesion funds, to them.

For the sake of illustration, we took the risky decision to total the needs listed in different studies in order to arrive at a single, not completely precise estimate. Where several sources cover one area of intervention, for example EE investments in Poland, we used the source which covers the widest area of measures and/or achieves the highest results in terms of energy savings or GHG abatement.

Comparing the total needs in the seven countries analysed with the sum earmarked for EE and RES under the Commission proposal for Cohesion policy regulation, we arrive at another question: the share of public and private funding in such investments.

Undoubtedly, the share of public investment needs to differ in different areas of intervention, given the many factors involved such as the type of beneficiary, the generated return on investment, the maturity of the market, non-investment public support etc. It is beyond the scope of this summary to cover this level of detail, and we do not tackle these questions. Rather, based on an informed estimation, experiences from the current financial period and the shift from granting to loans and financial instruments, we deliberately decided to use the leverage ratio of 1:4, or 25 percent public support share for EE and RES investments.

Notes

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Total investments necessary to utilise the potential for energy efficiency and renewable sources in seven CEE countries amount to EUR 24.626 billion anually, totalling EUR 172.382 billion in the 2014–2020 period. We see many reasons to substantially increase funding from EU Cohesion and Structural Funds into these areas, not only because of their contribution to the climate and energy targets, but especially because of their extraordinary employment and economic benefits.

CEE Bankwatch Network
Na rozcestí 1434 / 6
Praha 9, 190 00
Czech Republic

main@bankwatch.org
www.bankwatch.org
www.twitter.com/ceebankwatch