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What EU money can't buy: the green energy transformation just out of reach

Climate action in EU Cohesion Policy funding for Poland, 2014-2020

In the 2014-2020 budgetary period, Poland is the biggest beneficiary of the European Structural and Investment Funds (ESIF), set to receive approximately EUR 80 billion in total under the Cohesion Policy of the European Union. For another seven years, Poland will continue to benefit from its biggest net beneficiary status within the EU, with the expected transfers coming on top of the EUR 81 billion of ESIF financial support which Poland spent between 2004 and the end of 2013.[25]

Cohesion Policy funds are one of the main sources of investment activity in the economy, amounting to more than 50% of public investment between 2009 and 2013[26]. EU funds are also believed to be the key reason for Poland's continuous economic growth through the crisis years 2008-2010[27]. With a high share of public sector investment in total investment expenditures in Poland in the past decade, it is difficult to overemphasise the importance and impact of EU funds on GDP growth and development of basic infrastructure.

However, while supporting the transition from a post-communist economy, the European policies and the money that supports them have not succeeded in putting sustainability and climate change concerns at the centre of Polish development. Nowhere is this failure more visible than in the attitude of Poland towards the climate and energy regulations of the EU. While benefiting from billions of euros in financial transfers, Poland has continued to openly oppose – or quietly ignore – the push for more ambitious climate action and the transformation of the energy system that must underpin it.

The Cohesion Policy funds 2014-2020 are set to be the most important source of financial support to achieve the decarbonisation, renewable energy and energy efficiency targets declared by Poland within the framework of the Europe 2020 strategy[28]. However, despite the Union's effort to establish earmarking for a low-carbon economy, climate action reporting and other measures ensuring environmental mainstreaming across the Cohesion Policy programming documents, the current setup of EU funds will not bring Poland significantly closer to a low-carbon transformation.

That is because just as money must always follow political decisions to make them reality, even billions of euros in investments will not be enough to bring about an energy system transformation without a strong foundation of political commitment to climate action. That commitment is still missing in Poland – and it seems to be one of the few things that EU money cannot buy.

THE FOSSIL OF EUROPE: THE POLISH ENERGY SYSTEM

Poland is not a European leader on climate change action. Despite the formal agreement to adopt European climate regulations, Polish energy policies and strategies continue to follow a path which centres almost entirely on sustaining the existing energy system, to the exclusion of social or environmental costs as well as the potential benefits of climate-friendly transformation.

This attitude is evident in Poland's history of non-transposition of relevant EU laws – according to a 2013 study by Client Earth, only one out of eleven climate and energy directives was transposed on time[29]. The Polish renewable energy sources (RES) market had to wait almost five years after the final deadline for the adoption of a dedicated renewables law, which only happened in February 2015. A law transposing the energy efficiency directive from 2012 is missing to this day. Poland has also been the main member state actively opposing binding commitments to ambitious climate change action, including in the framework of the 2050 policy roadmap and the recent 2030 climate agreement of the EU.

Poland's reluctance to enact climate protection policies stems from the addiction of its economy to fossil fuels. The vast majority of Polish electricity is produced from coal, with indigenous hard and lignite coal accounting for 60% and

25 The Impact of Poland's EU Membership and of Cohesion Policy on National Development, Ministry of Infrastructure and Development of the Republic of Poland, Warsaw April 2014
26 Investment for Jobs and Growth. Promoting Development and Good Governance in EU Regions and Cities. Sixth Report on Economic, Social and Territorial Cohesion, European Commission, 2014
27 The Impact of Poland's EU Membership..., op. cit.
28 Europe 2020: A European Strategy for Smart, Sustainable and Inclusive Growth, European Commission, 2010
29 Black Paper: Implementation of EU Climate and Energy Law in Poland, ClientEarth, Warsaw 2013

25% of production respectively[30]. 77% of heat energy comes from burning coal, with other fossil fuels such as gas and oil adding up to cover almost 90% of heat production[31]. The energy system is an oligopoly, with four out of five coal-mining companies fully or partially state-owned and the production market mostly shared between four companies where the state is a majority stakeholder. A workforce of 100,000 hard-coal miners, 240 trade unions with significant political power as well as many interconnections between the government and the energy sector play a key role in maintaining the status quo and impeding the transition to a low-carbon economy.

The energy sector generates huge environmental, social and direct financial costs. Public support of coal mining and coal-based energy production, including subsidies, debt cancellations, free emissions allowances and social benefits for miners amounts to approximately EUR 34 billion in the period 1990-2012[32]. Despite the government's efforts, due to falling prices and demand, hard-coal mining is increasingly unprofitable, with the entire sector constantly on the verge of insolvency. The fleet of coal-burning power plants consists mainly of obsolete and inefficient installations more than 30 years old that need significant investments to modernise to EU standards. Industrial air pollution caused by power and CHP plants is estimated to cause as many as 5,400 premature deaths annually[33]. Air pollution with toxins and particulate matter, mainly originating from individual coal-burning heating systems, is one of the worst in the European Union, with more than 40,000 people dying prematurely each year due to low air quality[34].

Climate and energy targets

However, the urgent – and inevitable – need for transition towards a more economically and environmentally sustainable energy system is acknowledged by policy-makers almost exclusively in the context of fulfilling Polish commitments stemming from European agreements, most important of which is the Europe 2020 strategy.

The Effort Sharing Decision[35], which sets Poland's emissions reduction target, caps its non-ETS GHG emissions at a non-ambitious 14% increase compared to the 2005 baseline. Since 2000, Polish overall greenhouse gas emissions have remained fairly constant, at around 85% levels compared to 1990[36], with the majority of the reduction requiring no extra effort and having taken place in the 1990s as a result of the transformation to a post-communist economy.

The energy efficiency target in Poland is expressed as the total level of primary energy consumption expected in 2020 and set at 96.4 Mtoe – which means that this level of consumption is what Poland will strive to achieve by the end of the decade. Contrary to what could be expected, this target does not measure the reduction in primary energy consumption - Poland was in fact allowed to consume more. Although the energy intensity of GDP has fallen slightly in recent years, the total primary energy consumption increased steadily between the years 2003 and 2013 from 91 Mtoe to almost 98 Mtoe[37].

The Europe 2020 renewables target obligates Poland to reach a 15% share of RES in gross final energy consumption, and with the current 11.3%, Poland seems well-set on reaching it. Except, in reality, almost 46% of Poland's so-called renewable energy produced in 2013-2014 was generated in the process of co-firing biomass and coal, with energy companies collecting between 2005 and 2012 almost half of the available RES subsidies[38] for supplementing coal with – often unsustainable – biomass in industrial boilers. The public subsidies for co-firing are a subject of an infringement procedure based on a complaint brought to the European Commission in 2014 by Polish NGOs[39].

A recent assessment of Poland's performance in the various dimensions of the budding Energy Union praises Poland for being on track to meet its energy-related Europe 2020 targets[40]. However, given the low level of ambition or the misleading reporting on those targets, it is difficult to call

30 Sektor energetyczny w Polsce. Polska Agencja Informacji I Inwestycji Zagranicznych S.A., 2014
31 Energetyka cieplna w liczbach, Urząd Regulacji Energetyki, 2014
32 Hidden Cost of Coal, Greenpeace, April 2014
33 Coal Kills, Greenpeace Poland, June 2013
34 Air Quality in Europe - 2014 Report, European Environment Agency, November 2014
35 Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020
36 Environment 2014, GUS (Central Statistical Office), Warsaw 2014
37 Energy Efficiency in Poland in Years 2003-2013, Central Statistical Office, Warsaw 2015
38 Hidden Cost of Coal..., op. cit.
39 see e.g. http://www.clientearth.org/pl/news/latest-news/polish-government-spent-billions-supporting-pseudo-green-energy-2610
40 Assessment of Poland's Performance and Benefits of Energy Union, European Commission, October 2015

them transformational. Still, the Europe 2020 goals seem far-reaching when compared to those that Poland sets internally.

Case in point: the recently published draft Polish Energy Policy 2050 (PEP2050). The document is symptomatic of the broader Polish attitude towards EU environmental commitments in the way it refers to European energy and climate policies as a burden and uncomfortable obligation for an economy historically based on coal. It expresses at the same time the hope for less ambition in the future: '(...) we may expect that in the longer-term, with economic and social costs of radical [EU] climate action becoming more evident, voices calling for a deep restructuring of the European climate policies and their better balance with goals in the areas of competitiveness, industrial policies and energy security will become more prominent'[41]. The main scenario for the development of the energy system included in PEP2050 continues in the business-as-usual direction, with the energy mix based heavily on coal, while the alternative scenarios give more focus to other fossil fuels, nuclear energy or natural gas.

It must be noted, that none of the scenarios included in the PEP2050 presumes a share of renewable energy in the mix higher than 20%, with the main scenario inexplicably assuming that RES would only account for 15% of energy generation – the exact share they should have already by 2020. In the document, no external environmental and health costs of the business-as-usual scenario are mentioned or accounted for. The policy clearly reflects the well-entrenched political interests of the coal-run industries instead of a real consideration of trends and scenarios necessary to transform to a sustainable and green economy.

Another recently published Polish strategy, the National Programme for the Development of a Low-Emission Economy (NPLEE), although less obvious in its commitment to the high-carbon status quo, also follows the paradigm of putting economic growth ahead of the need to protect and restore the natural environment, particularly the stability of the climate and other planetary boundaries. Despite some welcome elements, such as a chapter on sustainability of biomass use and references to self-consumption and development of community and cooperative energy, the programme mostly moves along the same rhetorical lines as PEP2050. For example, discussing the expected growth of renewables, it says that 'there are neither reasonable premises nor technical possibility to act against it'[42].

The central scenario of the NPLEE assumes a GHG emission reduction path which aims at a 44% reduction until 2050 (compared to 1990 levels). Coupled with a 20% maximum share of renewables in the energy mix assumed by the PEP2050, those two figures illustrate the Polish considerations for climate change. They are particularly striking when contrasted with some alternative development scenarios: an analysis by a research institute proposing a feasible 88% GHG emission reduction by 2050 as compared to 2010[43]; a final report of a broad research project on low-carbon modernisation of the Polish economy concluding that a 63% GHG reduction by 2050 is completely feasible even without the use of CCS technologies[44]; an analysis commissioned by the government which states that in all considered scenarios, the potential for the development of renewable energy in Poland is greater than the forecasted consumption[45]. The decarbonisation target set forward in NPLEE is a far cry from the European Union's target of 80% to 95% emissions cuts adopted in the Energy Roadmap 2050[46].

FAILED EXPECTATIONS: CLIMATE MAINSTREAMING IN EU FUNDS FOR POLAND

Against this backdrop of the Polish energy market and climate policies, it is no surprise that the European funds are missing crucial strategic direction and the programming documents resemble more of a business-as-usual shopping list based on the existing needs of a carbon-intensive economy, rather than any real effort to create a new reality with the billions of euros of EU money.

BAD DESIGN: THE SYSTEM OF IMPLEMENTATION

The Polish system of implementation of ESIF itself does not foster cohesion in plans to achieve a low-carbon transformation of the economy. Cohesion Policy funds

41 Draft Polish Energy Policy 2050, Ministry of the Economy, August 2015
42 Draft National Programme for the Development of Low-Emission Economy, Ministry of the Economy, August 2015
43 Energy [R]evolution for Poland, Institute for Renewable Energy, published by Greenpeace Poland, October 2013
44 Low-emission Poland 2050: Final report, Warsaw Institute for Economic Studies and Institute for Sustainable Development, Warsaw 2013
45 Analysis of the Boundaries of Development of Renewable Energy Sources in Poland in the Perspective of 2050, Kearney for Ministry of Economy of the Republic of Poland, 2014
46 Energy Roadmap 2050, European Commission, 2011

are implemented through six National-Level Operational Programmes (NOPs) as well as sixteen Regional Operational Programmes (ROPs), one for each voivodeship (highest-level administrative subdivision, corresponding to a province). The NOPs, implemented by central government bodies, will support primarily large-scale, nationwide projects; they are investment strategies focused on specific areas, such as human capital (OP Knowledge, Education and Development), innovation (OP Intelligent Growth) or connectivity and ICT (OP Digital Poland) and big infrastructure, including transport and energy (OP Infrastructure and Environment).

Such division of EU funds' programming documents in thematic siloes is not supportive of a horizontal approach to the question of sustainable development – but neither is the all-in-one structure of the Regional Operational Programmes. Given that Poland is a unitary state, and not a federation of regions, when it comes to investing European money, the regional autonomy is significant. Each Polish voivodeship has a separate development strategy and a financial plan to support it, and Operational Programmes are, in essence, regional budgets which follow an EU-mandated structure. But the devil is often in the detail, and in this case, in the Detailed Descriptions of Priority Axes (DDPAs), which are the key implementation documents and the true basis for the adoption of criteria for the selection of EU-supported projects. And while ROPs are official programming documents subject to the approval of the European Commission, the DDPAs are considered 'technical' or 'supporting' documents and as such are adopted outside any EC control – and often without any involvement of the civil society partners[47].

This decentralisation, while allowing the regional authorities the freedom to adapt the spending plans to best meet the region's development needs, has a side-effect of creating unequal conditions of accessing public money earmarked for the same purpose for beneficiaries across Poland. With each voivodeship independently adopting implementation documents to interpret the provisions of their Operational Programme, as well as coming up with their own project selection criteria, the conditions and requirements of a project's eligibility vary greatly across voivodeships. Effectively, in any given two regions, the project selection criteria adopted to implement the same investment priority will differ, and their quality – particularly when considering the inclusion of climate and environmental concerns – will vary, creating an unequal investment environment. While private companies will be largely free to choose the region with the most advantageous conditions for granting public support in a given sector, other beneficiaries, such as local self-governments, small entrepreneurs or community organisations, will have to contend with different conditions of accessing support compared with their counterparts from a neighbouring region.

While recognising the right of Polish regions to plan and own their development, as shown in their freedom to adopt individual Operational Programmes, there is a clear need to change a system which openly promotes unequal distribution of public money. While the choice of investment priorities should remain with the regional authorities, the project selection criteria must be universal, elaborated and adopted at the central level with respect to the principles of partnership and sustainability. That way, all regions which select a certain investment priority would apply the same rules of eligibility. It would also be an important measure to ensure high quality of the project selection criteria – including the proper horizontal inclusion of environmental and climate mainstreaming. This is particularly important because almost 50% of all Cohesion Policy funds allocated to Thematic Objectives of the low-carbon economy, climate change adaptation and protection of biodiversity will be invested through Regional Operational Programmes.

As it is, no focused push for the low-carbon transition from the central government and the decentralised structure for the implementation of EU funds together threaten the significant potential of the Cohesion Policy money being allocated to climate action. The general declarations of support for mainstreaming of sustainable development are there in the programming documents, they follow the specific format and guidelines mandated by the European Commission. However, from the Partnership Agreement to calls for proposals, generally the more detailed the document, the more the commitment to climate action and environmental mainstreaming becomes diluted.

47 See letter to the Minister of Infrastructure and Development signed by 382 Polish NGOs calling for partnership in the implementation of EU funds and public consultation of Detailed Description of Priority Axes: http://wiadomosci.ngo.pl/wiadomosci/1350933.html

SHAKY FOUNDATION: THE PARTNERSHIP AGREEMENT

In accordance with EU guidelines, the Partnership Agreement (PA) between Poland and the European Commission includes a chapter detailing how the total sum of interventions implemented with the support of European Structural and Investment Funds will help steer the sustainable development of the economy, in line with the overarching objectives of the Europe 2020 strategy. The chapter is unexpectedly thorough in its approach to the complex task of mainstreaming environmental concerns throughout all stages and levels of programming and implementation of EU funds, and it clearly puts the responsibility for properly addressing climate concerns on each individual OP.

In an effort to provide a comprehensive catalogue of how the principle of sustainability should be employed in the process of planning and spending of European money, the PA lists many important elements, including a focus on an efficient and innovative approach to the management of resources such as water, waste and energy, minimising GHG emissions and pollution, ensuring the application of technical solutions which maximise the resilience of infrastructure and ecosystems to climate change, and finally the need to build the know-how and awareness of resource efficiency and environmental protection across all sectors of the Polish economy. It calls for all OPs and project selection criteria to systematically apply the principle of 'polluter pays' and promote resource efficiency in the whole life-cycle of a project. It also proposes a number of reasonable examples of how to include climate considerations in all project selection criteria.

Specifically, the PA states that energy efficiency, as a key component of a low-carbon transformation, is an overarching concern and must be applied to all infrastructural investment financed from EU funds. It reads: '[...] it is not sufficient to plan priority axes or actions that serve improving energy efficiency; on top of that, energy efficiency should be treated as a horizontal issue that constitutes the practical dimension of applying the sustainable development principle and should be reflected by project selection criteria.'[48] Yet, the low-carbon transformation of all branches of the economy is far from being the overarching theme, and is mentioned mainly in reference to implementation of Thematic Objective 4 on supporting the shift to a low-carbon economy.

CLIMATE CHANGE AND OTHER SPENDING

The Partnership Agreement, referencing the EC Implementing Regulation 215/2014, puts the indicative estimation of total Cohesion Policy climate spending at EUR 11.7 billion, barely above the obligatory 15% mandated by the Common Provisions Regulation 1303/2013. Together with allocations under the Rural Fund, Connecting Europe Facility and Fisheries and Maritime Fund, the amount of climate spending is said to reach EUR 22.7 billion and this constitutes a 20% share of the whole EU budget for Poland. The figures, however, lack a frame of reference and it is impossible to conclude from the PA whether the sizeable amount of money will be enough – not just to help reach the Europe 2020 targets, but also to help shift the Polish economy onto a track to carbon-neutral development.

GRAPH 13: Investment areas of EU Cohesion Policy funds in Poland; source: our own calculations based on approved Operational Programmes according to categories of intervention according to Commission Implementing Regulation (EU) No 215/2014 of 7 March 2014

		Euro
36%	transport	27,616,739,005
21%	production and consumption	16,111,387,896
8%	environment	5,927,267,371
7%	energy infrastructure	5,630,020,511
7%	employment	5,217,594,851
6%	education	4,601,751,970
4%	information and communication technology	3,195,812,590
4%	social inclusion	2,704,653,961
4%	other	3,199,160,828
3%	social infrastructure	2,662,072,352

Given the many references to European funds being the key to achieving the Europe 2020 targets, particularly in the area of energy and climate, it is surprising that nowhere in the PA can be found an estimation of the total amount of investment which would be necessary to stimulate the shift to a low-carbon economy.

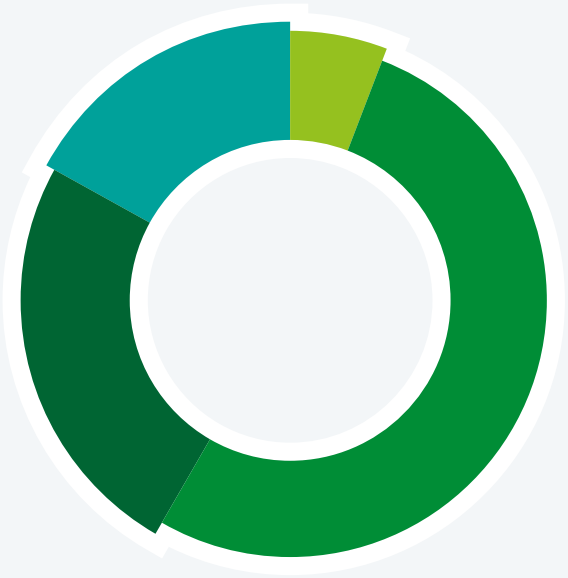
The conclusions of the ex-ante evaluation of the PA, particularly in the section 'Assessment of adequacy of financial allocation under the Partnership Agreement', do not do much to clarify. The assessment vaguely references 'other public policies and the private sector' as an explanation for the low level of planned financing for renewable energy. More specific investment needs are mentioned in discussing the allocation to TO5 – adaptation to climate change. The evaluation states that the EUR 1.2 billion earmarked for climate change adaptation will cover around 35% of the total cost of investments needed in this area, however, it neglects to mention other sources of funding. Explaining this figure, the evaluation points to EU restrictions on directing ESIF to flood prevention measures, giving a good example of how Polish programming documents look at adaptation primarily through a filter of river regulation and costly hard infrastructure instead of focusing on natural solutions.

While adaptation to climate change involves significant financial effort, failing to implement the necessary measures will generate costs far exceeding those expenditures in the coming years. Estimates show that climate-related extreme weather events in the years 2001-2010 were the cause of financial losses of EUR 13 billion, and a failure to implement adaptation measures will result in estimated additional losses worth EUR 21 billion by 2020.[49]

Meanwhile, transport and direct GDP growth – and not climate action - remain the main priorities for this EU budget in Poland, with the planned allocations totalling 57% of all available funds. While low-carbon solutions, such as clean urban transport and railways, are important areas of investment, it will once more be roads that consume the majority of public support.

Despite its clear identification of the problem of horizontally and vertically mainstreaming climate concerns, the Partnership Agreement falls short of following its own advice and ensuring coherence of all Thematic Objectives with the

GRAPH 14: Share of transport modes in total transport funding per country. Source: our own calculations based on approved Operational Programmes according to categories of intervention



		Euro
53%	roads	14,623,901,307
25%	railways	6,782,113,887
17%	clean urban	4,676,602,012
6%	other	1,534,121,798

principles of climate action or promoting low-carbon transition in all sectors. Even with many of the correct elements in place, the Partnership Agreement's role in mainstreaming climate concerns lies more in providing a menu from which the OPs can pick and choose, and less in setting a clear, result-oriented vision of economic transformation.

DISTORTED FOCUS: OPERATIONAL PROGRAMMES

While discussing the Polish Operational Programmes, it is important to note that any observations or conclusions made here on how climate concerns are integrated across 22 spending plans are, by necessity, a generalisation.

48 Partnership Agreement, English Version, Ministry of Infrastructure and Development of Poland, May 2014
49 Ministry of Environment, Strategic Plan for the Adaptation of Sectors and Areas Subject to Climate Change by 2020, With the Prospect of the Year 2030, Warsaw 2013

Particularly in the case of the 16 regional OPs, the climate ambition can vary greatly, despite the fact that they all follow the same basic structure and include the same choice of thematic objectives. With that caveat, the conclusion can be made that low-carbon and climate-proof transformation of the Polish economy is not a key development priority, underpinning all EU funded investments. Rather, it is just one of the siloed directions of public intervention, mandated by the EU requirements on thematic concentration and ring-fencing. Despite the sizeable allocations and a formal narrative on achieving climate targets, the goal of the European funds in Poland will be to sustain, and not to transform.

A look at how the Operational Programmes, and especially their implementation documents, approach the issue of sustainable development in general and climate action in particular is a study of how the provisions of the Partnership Agreement become diluted or sidelined as the investment plans become more detailed and less declarative. In the Operational Programmes, a popular strategy is to copy the solutions proposed in the Partnership Agreement in a chapter on the horizontal inclusion of sustainable development, which is a required element of all programmes. For many OPs, this general chapter together with a table of indicative allocations to climate action constitute the entirety of their commitment to mainstreaming climate change. Mentions of low-carbon growth, resource efficiency, climate proofing, or 'polluter pays' rarely trickle down to the description of the priority axes or the guiding principles for the selection of projects. And if they do, they are generally limited only to those Thematic Objectives which focus directly on the environment and energy.

At the central level, low-carbon development is the main topic of the OP Infrastructure and Environment (OP IE) and the existence of one national-level programme focused – at least in name – on sustainable development, seems to excuse all remaining NOPs from including a serious consideration of climate impact of the planned interventions. For example, symptomatically for strategies which do not have a direct and obvious relation to the environment, the OP Digital Poland barely mentions climate change as one of the global trends and pays much more attention to the social dimension of sustainable development than to environmental concerns. Following the idea of mainstreaming the horizontal principle of sustainable development, the OP Digital Poland misses the chance, for example, to push for the climate-proofing of all investments in ICT infrastructure, prioritising green public procurement procedures or ensuring high energy efficiency across all financed investments.

INFRASTRUCTURE VS ENVIRONMENT

The OP Infrastructure and Environment, thought to be the main vehicle to deliver the low-carbon transformation of the national economy, is the biggest Operational Programme in the EU with a budget of EUR 27.4 billion, more than the total ESIF allocations of the Czech Republic or Hungary, or more than all Cohesion Policy funds in Slovakia, Latvia and Croatia combined[50]. But only around 21% of this money is allocated to climate action – which might be considered surprising for a programme set to deliver the 'sustainable development infrastructure which will significantly support the development of an economy which is more competitive and at the same time more sustainable in the economic, environmental and spatial sense'[51].

Among all NOPs, OP IE is the most thorough in describing the plan to include environmental and climate concerns in all supported investments. The guiding principles of climate resilience and resource efficiency, although not mentioned expressly across the OP's different priority axes, are in fact included in the general project selection criteria common to all future projects. Applicable horizontally to all infrastructural investments, the criteria will serve to evaluate a project's compliance with environmental legislation, its impact on the principle of sustainable development as well as its climate resilience. In this comprehensive approach at the criteria level, OP IE stands out among other Operational Programmes.

Interestingly, a key result indicator obligates the programme to deliver a 7.6% greenhouse gas emissions reduction, bringing Polish GHG emissions to 79.4% compared to the 1990 base year. It is unclear whether this reduction is to be a direct result of the OP's interventions, and which sectors of the economy it covers. Output indicators in several Investment Priorities assume an estimated annual decrease of GHG emissions, which, in the entire OP, totals 875,000 tonnes of CO_2 equivalent yearly. In 2012, according to UN data[52], Poland emitted 399 million tonnes of CO_2 equivalent (excluding emissions from land use change and forestry), which puts the planned yearly reduction indicated in the OP IE at a fraction (0.2%) of Poland's total emissions.

50 DG Regio: http://ec.europa.eu/regional_policy/en/funding/available-budget/
51 Actual quote, translated from Polish by the author; Operational Programme Infrastructure and Environment 2014-2020, Ministry of Infrastructure and Development of Poland, 2014
52 Greenhouse Gas Inventory Data, http://unfccc.int/

It is also worth noting, that all OP IE emissions reduction indicators can be found in investment priorities relating to energy. The programme does not provide more information about how the GHG reduction indicated in metric tonnes will translate into the ultimate goal of 76% total decrease of CO_2 emissions, and neither does it comment on the expected carbon impact of the less environmentally-friendly investments to be financed from Cohesion Policy funds, such as waste incinerators, big road infrastructure or gas transmission projects.

EUROPEAN BUSINESS-AS-USUAL FUND

The National OP Knowledge Education Development, financed from the European Social Fund, states that it has a neutral impact on the horizontal principle of sustainable development, without addressing the potential of education and training for climate action. In this, the OP KED shows well the lost potential of the European Social Fund, which in the Polish programming documents – both national and regional – fails to deliver any climate mainstreaming. Given the need for raising awareness and building know-how on climate change and energy efficiency, mentioned in the PA, as well as the mismatch between current education and vocational programmes in the country and the requirements of an innovative green market, the lack of appropriate measures to include green job training in the OPs seems like a lost opportunity to adapt the population to the transitioning economy.

The majority of the Regional Operational Programmes also fail to take advantage of the possibilities opened by the introduction of the cross-financing mechanism, which allows complementing investments in hard infrastructure with ESF-funded soft measures, such as training, education and awareness-raising. Knowledge and skills are a crucial element of a transformation to a low-carbon economy, particularly in the energy sector; business-as-usual will not be sufficient to bring about a fundamental change in people's knowledge and attitudes. Despite that, only one region decided to allocate funding to cross-financing within the Investment Priority on support for renewable energy. Cross-financing will also only be used by two voivodeships to ensure higher effectiveness of investments in energy efficiency in SMEs and in buildings.

Smart specialisations

The OP Intelligent Growth considers eco-innovations which support the development of a low-emission economy to be one of its key priorities, however, gives no further details on how climate change will be considered in the process of selecting projects, except to make reference to the national smart specialisation strategy (SSS). This document lists a number of areas where public investments in research and development will be concentrated. Together with the individual regional smart specialisation strategies, the national-level plan is the main blueprint for Cohesion Policy funds' investments in innovation and intelligent growth.

In the national strategy, under the heading of 'sustainable energy', Poland plans to support innovation in the area of the so-called clean coal technologies, cogeneration based on more efficient use of fossil fuels and other false solutions, instead of concentrating support on diverse clean renewable technologies. RES, particularly in the context of micro-installations and biofuels, is indeed another smart specialisation listed in the national plan[53]. It is interesting to note that if Polish companies indeed become innovators in the area of renewable technologies, in the current political and legal environment, such innovations would mostly be developed to export[54].

At the regional level, once again, the quality and the climate change focus of smart specialisation strategies is varied across regions. Some, like Małopolskie voivodeship, plan to support innovation in the field of renewable energy and climate adaptation, giving a detailed recommendation to include such focus in the Regional Operational Programme[55]. But many others, among them the SSS of Wielkopolskie, Zachodniopomorskie or Mazowieckie, mention climate change mainly in relation to profitable bio-food production or animal agriculture. Kujawsko-Pomorskie sees eco-innovation as a way to develop new and efficient ways of exploiting natural resources, capturing the predominant trend of seeing the environment mainly as a stepping stone to improved competitiveness.

Smart specialisation strategies being part of the broader effort to deliver the Europe 2020 targets, a clear focus on climate-friendly innovations would be a fair expectation,

53 National Smart Specialisation, Ministry of Economy of Poland, April 2014
54 Such situations already take place in Poland; see for example, Saule Technologies and the Polish innovation of using perovskites in the generation of electricity from solar energy: http://sauletech.com/news/polish-perovskite-solar-cells-attract-japanese-investor.html
55 Regionalna Strategia Innowacji Województwa Małopolskiego 2014-2020, Zarząd Województwa Małopolskiego, July 2015

considering the need for a deep transition of the Polish energy system. Instead, in a manner very characteristic of the entire system of implementation of European funds in Poland, the sustainability concerns are visible mostly on the surface. From the set-up of the Operational Programmes, it is difficult to tell how much of the funds allocated to support intelligent innovation will help finance the research and development for low-carbon transition – although the category of intervention 65 (Research and innovation processes, technology transfer and cooperation in enterprises focusing on the low-carbon economy and to resilience to climate change), which in the whole country accounts for EUR 444 million, gives an approximation. Climate and environmental sustainability are certainly a topic – but one generally treated as an isolated area of public intervention and not an unequivocal foundation for sustainable growth.

Regional Operational Programmes: the vanishing commitment

In the 16 Regional Operational Programmes, low-carbon solutions and mainstreaming of climate change are generally seen more as EU-imposed barriers to unrestrained exploitation of natural resources and as obstacles to growth, rather than a legitimate direction of development in regions. The Regional Operational Programmes are unified in invoking Europe 2020 sustainable development targets as goals to be achieved with the support of Cohesion Policy funds. However, those goals often overlook the environmental pillar of sustainable development, focusing instead on the social dimension and sustained (or 'constant') economic growth.

For example, the ROP of Pomorskie region defines sustainable development as a 'durable improvement in the quality of life of the citizens', and names life-long learning and better employment alongside green public procurement and climate resilience of vulnerable infrastructure among measures used to operationalise this horizontal principle in the programme. Lubelskie region neglects entirely to include environmental and climate concerns among horizontal challenges to be addressed by its OP, and the general investment direction under TO4 serves mainly to help supply the energy services needed to power up the growing economy.

If any examples are given of how climate action will be mainstreamed across all operations financed from the ROP, they are most often limited to general declarations and Priority Axes which directly relate to the environment (TO4, 5, 6). Principles such as 'beneficiaries will observe the rule of polluter pays' or 'beneficiaries will ensure resource and energy efficiency of the built infrastructure' are common, but often details about how this principle will indeed be reflected in the entirety of the programme are missing. Making a bridge between those declarations and the operational reality of the implementation documents and especially project selection criteria remains a challenge.

The issue of energy poverty can be used to illustrate this phenomenon. Energy poverty is a widespread problem, affecting approximately 20% of Polish citizens[56]; its prevalence stems mostly from the very low energy standard of residential buildings. The Partnership Agreement lists the alleviation of energy poverty as one of the anticipated positive effects of the horizontal application of the principle of sustainable development. Following this logic, all Regional Operational Programmes mention combating energy poverty in the context of investments in energy efficiency in buildings, declaring that an investment's impact on energy poverty will be one of the guiding principles for the selection of projects. But if those declarations are reflected in the implementation document at all, the Detailed Description of Priority Axes generally fails to provide any operationalisation of the concept. In the end, energy poverty concerns make their way to very few project selection criteria, and guidelines on how to measure and evaluate the issue are still missing.

Still, there are a few regions which show much more ambition and understanding of the opportunities of low-carbon development. Podlaskie, a region in North-Eastern Poland, stands out among other voivodeships with an exemplary approach to mainstreaming climate action. Podlaskie is the only region whose ROP dedicates a separate sub-chapter to horizontal integration of climate concerns, and it systematically includes climate performance and resource management among the guiding principles for the selection of infrastructure projects. In TO1, the region directly promotes green businesses when implemented on Natura 2000 sites, and also plans to implement low-carbon solutions under the priorities on revitalisation and public infrastructure[57]. Podlaskie also goes further than any other region in its call for an 'energy revolution' based on decentralised, renewable energy sources, clearly seeing green innovation and a resource-efficient economy as foundations for sustainable growth. Those declarations are operationalised via project selection criteria.

LOST OPPORTUNITY: LOW-CARBON TRANSFORMATION IN POLAND

The EU concept of horizontally integrating climate concerns across all interventions has clearly not been entirely successful in Poland. Still, the Operational Programme Infrastructure and Environment, as well as all 16 regional OPs include a

56 Efektywniej o efektywności - przewodnik po wdrożeniu Dyrektywy Parlamentu Europejskiego i Rady w sprawie efektywności energetycznej (EED), Climate Coalition and WWF Polska, Warsaw 2013

57 Analiza wdrażania funduszy UE w Regionalnym Programie Operacyjnym 2014-2020 i dokumentach uszczegóławiających pod kątem zrównoważonego rozwoju - woj. podlaskie, Polish Green Network and Bankwatch, June 2014

very specific – although mostly siloed – focus on supporting low-carbon transformation in all sectors of the economy. The scope of TO4 is in fact not quite all-encompassing, because the planned interventions cover primarily the sectors of energy and clean transport. But with the 15% earmarking, more than EUR 9 billion in Cohesion Policy-supported investment will guide the development of the Polish low-carbon economy. At least, that is the official narrative – because in truth, many investments financed under the umbrella of low-carbon development will either have no impact at all or will directly put the transformation to an energy-efficient, sustainable, renewables-based society at risk.

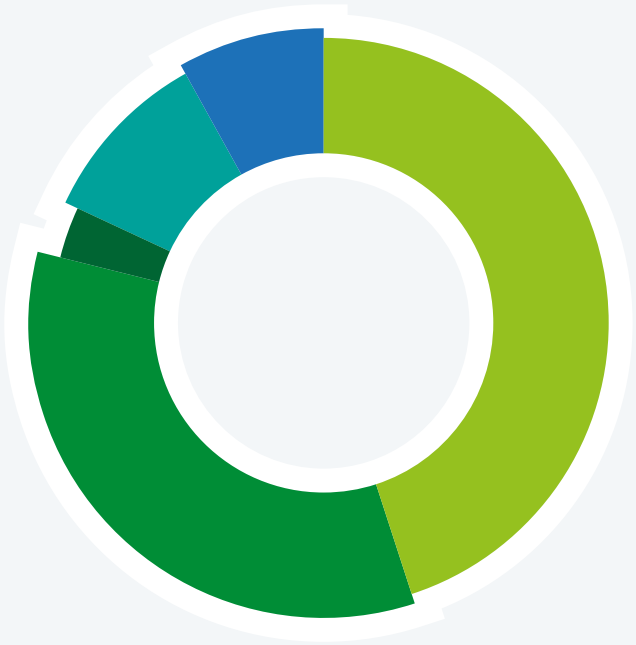
Allocations

The EUR 9.5 billion allocated across all Operational Programmes to Thematic Objective 4 on the low-carbon economy will support a broad range of investments: energy efficiency in public and residential buildings, improved energy efficiency of enterprises, renewable energy sources, modernisation and construction of power grids, high-efficiency combined heat and power (CHP) generation, central heating grids, improvement of air quality and, last but not least, clean urban transport infrastructure, including intelligent management systems and low-emission public transportation.

According to the ex-ante evaluation of the PA in the assessment of adequacy of financial allocation, the high overall sum of money allocated to Thematic Objective 4 on the low-carbon economy is a visible indication of a shift in funding priorities; the obligatory earmarking is, however, not mentioned in this section. The PA states clearly that a vast majority of this allocation will be supporting energy efficiency, with as much as 80% of funds programmed under TO4 serving to improve the efficiency of energy production, distribution and consumption. Such a high concentration of funding is said to be the most appropriate solution given the high energy-intensity of the Polish economy and the potential benefits of energy efficiency across all sectors. Renewable energy is another priority, receiving, however, a much lower share of 12% of the overall allocation to the low-carbon economy.

Against this background, it is disappointing to see that contrary to declarations, the amounts are distributed very differently. Low-emission urban transport and not improvements in energy efficiency will benefit from the highest overall share of funds, receiving approximately 45% of all TO4 allocations. Energy efficiency measures – in all branches of the economy, including housing, businesses and combined heat and power generation – account for little more than a third of the available funds, with renewables set to receive close to EUR 940 million of EU support, or approximately 10% of all funds for low-carbon development.

GRAPH 15: Allocations under Thematic Objective 4: 'shift to the low-carbon economy'. Source: our own calculations based on approved Operational Programmes according to categories of intervention



		Euro
45%	transport	4,270,260,347
34%	energy efficiency	3,289,829,809
10%	renewables	938,928,986
8%	other	753,685,293
3%	electric grids	299,217,382

Recognising the importance of clean public transportation to sustainable development in Poland, it is difficult to agree that such a division of funds is optimal to deliver the kind of leverage effect needed to stimulate a real shift to a low-carbon economy. Given the high-energy intensity of the Polish economy, in particular the substantial heat losses in the building sector, the Partnership Principle is right to stress the significance of energy efficiency measures and plan for sizeable investments in this field. And yet, more than EUR 4 billion slated to support clean urban transport falls under the 15% earmarking for TO4 and effectively shifts focus from transformation of the energy system to the purchase of a low-emission fleet of buses or trams.

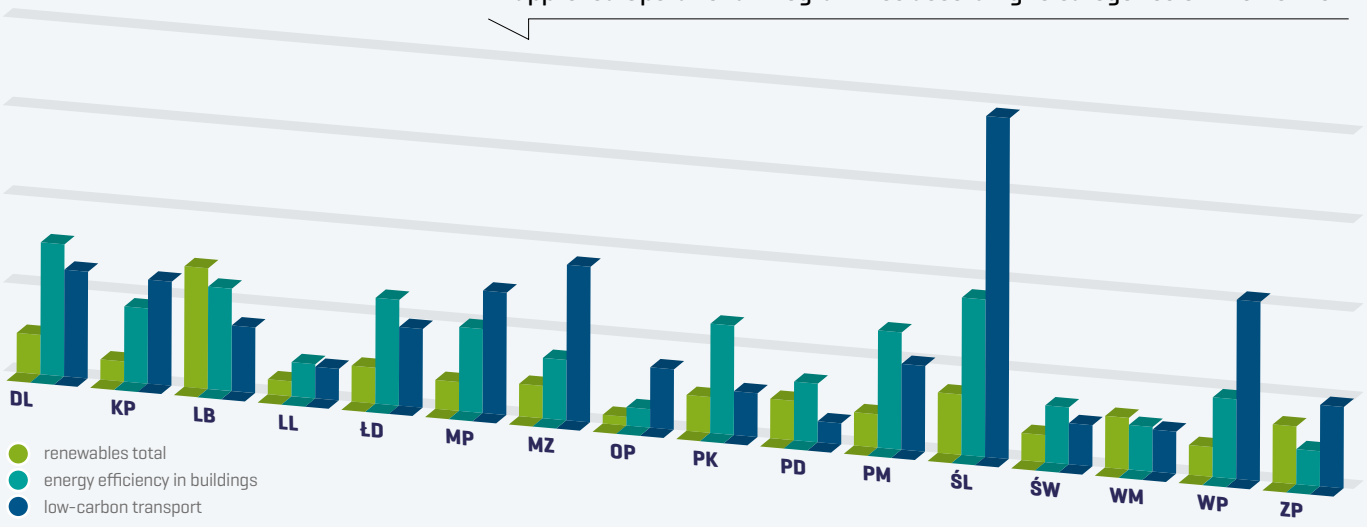
As a result, instead of prioritising energy efficiency, as indicated in the PA, as many as seven Regional Operational Programmes allocate more funds under TO4 to clean transport than to improving energy efficiency in public and residential buildings[58], and clean transport receives more funding than renewable energy in all but two voivodeships. All transport-related spending, including low-carbon urban systems of public transportation, should be financed from a different budget line, allowing more funds to be allocated to energy efficiency and renewable energy sources under the EU-mandated earmarking.

Energy efficiency

The Polish economy ranks among the most energy-intensive in the EU, with significant energy losses and potential for improved efficiency across all sectors of the economy. The building sector is the single most energy-consuming area of the economy, responsible for approximately 40% of final energy use[59]. This high energy intensity is a consequence of the predominantly poor energy standard of Polish residential buildings, with average energy performance in housing of 215-230kWh/m^2 per year[60]. Focused measures to improve energy efficiency have the potential to significantly decrease Polish dependence on fossil fuels and the GHG emissions intensity of the economy, at the same time improving the quality of life of hundreds of thousands of energy-poor households.

The need for significant and effective investment in this area is a fact recognised in the EU Cohesion Policy funds' programming documents. The total allocation to energy efficiency in buildings, although much lower than outlined in the Partnership Agreement, at EUR 2.1 billion is sizeable and significantly higher than the EUR 500 million earmarked for this purpose in the previous period 2007-2013[61]. However, assessing the transformative potential of this money is difficult, because neither the PA nor the Operational Programmes give an estimation of investments needed to realise the potential of energy savings, and to reach the energy efficiency targets set by Poland. This is not unexpected, given that even the Polish National Action Plan of Energy Efficiency does not specify the amount of money needed to modernise the buildings sector. Expert studies on the subject propose different figures: from approximately EUR 100 billion in total[62], between EUR 1.3 and 8.4 billion annually depending on how deep the retrofitting of buildings would be[63], to at least EUR

GRAPH 16: Thematic Objective 4 allocations, 'shift to the low-carbon economy' in sixteen Regional OPs. Source: our own calculations based on approved Operational Programmes according to categories of intervention



Euro	DL	KP	LB	LL	ŁD	MP	MZ	OP	PK	PD	PM	ŚL	ŚW	WM	WP	ZP
renewables total	45,608,280	23,038,588	138,162,310	17,640,947	41,438,767	33,000,000	37,707,260	10,400,000	41,495,867	45,000,000	38,691,180	67,913,372	31,086,206	58,823,795	34,170,000	66,135,000
energy efficiency in buildings	151,572,922	86,394,705	117,761,014	39,202,104	121,464,502	96,000,000	69,578,968	21,500,000	125,565,733	67,500,000	138,320,969	181,838,404	65,036,974	50,942,239	91,000,000	40,576,416
low-carbon transport	122,760,326	119,035,575	75,966,071	36,134,736	90,611,083	140,000,000	178,030,372	69,350,000	50,605,066	24,040,000	98,019,332	398,607,765	47,091,256	48,035,878	205,604,539	92,900,000

Województwo (voivideship names)

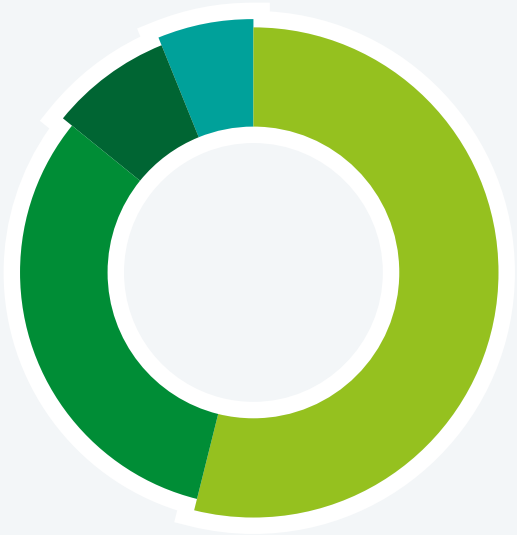
DL - Dolnośląskie
ŁD - Łódzkie
PK - Podkarpackie
ŚW - Świętokrzyskie
KP - Kujawsko-Pomorskie
MP - Małopolskie
PD - Podlaskie
WM - Warmińsko-Mazurskie
LB - Lubuskie
MZ - Mazowieckie
PM - Pomorskie
WP - Wielkopolskie
LL - Lubelskie
OP - Opolskie
ŚL - Śląskie
ZP - Zachodniopomorskie

58 Comparison is based on categories of intervention 013 and 014 (energy efficiency in the public sector and in housing) and 043, 044 and 090 (clean urban transport infrastructure with management systems and cycling and footpaths) included under Thematic Objective 4 low-carbon economy
59 Energy Efficiency in Poland in the Years 2002-2012, Central Statistical Office, Warsaw 2014
60 Low-Emission Poland 2050, Institute for Sustainable Development, Institute for Structural Research, II Energy Efficiency, July 2013
61 Cost-effectiveness of Cohesion Policy Investments in Energy Efficiency, European Court of Auditors, 2012
62 Potencjał efektywności energetycznej i redukcji emisji w wybranych grupach użytkowania energii. Droga naprzód do realizacji pakietu klimatyczno-energetycznego, PKE, FEWE, Katowice 2009.
63 The Impact on the Job Market of the Programme of Deep Retrofitting of Buildings in Poland, European Climate Foundation, Warsaw 2012

110 billion in the optimal renovation scenario[64]. The EUR 2.1 billion to be invested in Poland between 2015 and 2022, even accounting for the estimated EUR 9 to 12.5 of leveraged private funds for every euro of public subsidies[65], will likely be insufficient to make a significant difference.

Recognising that the role of Cohesion Policy is not to finance everything, it must be said that total allocations aside, the arguably biggest potential for energy savings will remain largely untapped. The Partnership Agreement points to housing, and particularly multi-family communal and social buildings – as the sector where the renovation gap is especially significant, reaching 70% of costs. Residential housing is the single most energy-consuming sector of the Polish economy, responsible for approximately 30% of all energy consumption in the country. In contrast, for public buildings this share is no higher than 10%[66]. However, this proportion is not reflected in the amount of EU funds allocated to efficiency measures. Despite the potential to achieve significant savings and curb energy poverty, Poland allocates only approximately EUR 788 million to energy efficiency in housing, compared to EUR 1.3 billion for improving energy standards in state and municipality-owned buildings. There are no funds allocated to retrofit Poland's five million single-family dwellings, which amount to approximately 80% of all residential buildings in Poland and house more than 40% of the population[67].

GRAPH 17: Energy efficiency allocations according to type of beneficiary. Source: our own calculations based on approved Operational Programmes according to categories of intervention



		Euro
54%	EE public infrastructure	1,338,619,117
32%	EE housing	810,031,748
8%	EE SMEs	192,505,224
6%	EE large entreprises	160,763,284

Buildings are not the only sector where EU funds will support energy efficiency measures. Small and medium enterprises will be able to access EUR 193 million of support through the Regional Operational Programmes, while OP Infrastructure and Environment allocates approximately EUR 160 million to improve the energy performance of big companies. Unlike in housing, where a majority of regional-level funding will be distributed via grants, many OPs plan to offer support to businesses through various financial instruments. It must be noted that at the regional level, only nine voivodeships include dedicated support for efficiency in SMEs in their spending plans. For example, Wielkopolskie excluded Investment Priority 4b from the ROP, despite considering this sector a priority in its regional development strategy[68].

Renewable energy sources

A lack of political will and an unstable investment environment (a consequence of many legal changes and an unpredictable support scheme) have caused the renewable energy sector in Poland to be significantly underinvested in. The Partnership Agreement, referencing the National Action Plan for renewable energy[69], estimates that in order for Poland to reach its Europe 2020 renewables target, approximately 6.2 GW of power must be installed in renewable electricity generation, in addition to the existing installations with total installed power of 6 GW. Again, a robust estimate of the total amount of investment needed to achieve this goal can be found neither in the PA nor in the individual OPs. Existing studies based on the prognoses of the conservative National Action Plan estimate the total investment expenditure needed between 2011 and 2020 at EUR 26.7 billion[70]. 55% of this sum should be invested in green electricity production.

In 2011, the Polish Institute for Renewable Energy estimated that in order to provide 10% of investments necessary to deliver the country's RES targets in the years 2011-2020, the allocation to the development of renewables in Polish regions financed from EU funds should total EUR 2.3 billion[70]. Even given the time lapse since that initial estimate, the EUR 928 million which will support development of renewables both at the regional and national level seems inadequate, and definitely does not go far beyond the baseline – and certainly not transformative – scenario of the National Action Plan.

64 Strategy for the Modernisation of Buildings: a Road Map 2050, IEŚ, KAPE, NAPE, Kraków 2014
65 Alleviating Fuel Poverty in the EU. Investing in Home Renovation, a Sustainable and Inclusive Solution, Buildings Performance Institute Europe, May 2014
66 Low-Emission Poland 2050, op. cit.
67 Główny Urząd Statystyczny, census of 2011
68 Analiza wdrażania funduszy UE w Regionalnym Programie Operacyjnym 2014-2020 i dokumentach uszczegóławiających pod kątem zrównoważonego rozwoju - woj. wielkopolskie, Polish Green Network and Bankwatch, June 2014
69 National Action Plan for Renewable Energy, Ministry of Economy of Poland, 2010
70 Investment Potential in Renewable Energy until 2020, Grzegorz Wiśniewski - Institute for Renewable Energy, 2011

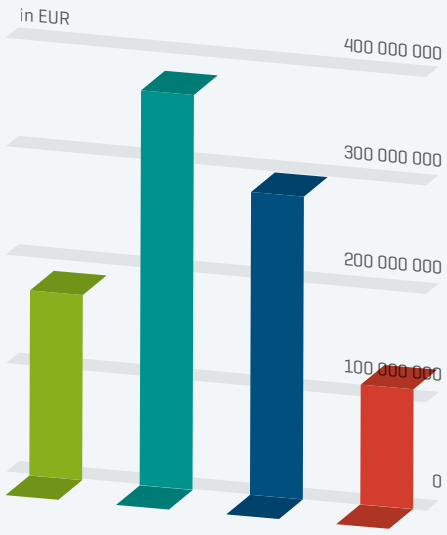
In reality, both the financial allocation as well as the result indicators show the lack of ambition of Polish programming documents when it comes to renewable energy. The best illustration is the combined figure corresponding with the Common Indicator CI30: Additional capacity of renewable energy production, according to which EU funds will support the installation of approximately 960 MW of power. Compared with the existing needs, and in light of the significant potential of development of renewables in Poland, this number is not just unambitious – it can very well be a big missed opportunity for the Polish regions.

This lack of foresight is not the only thing difficult to understand – another is the very different ratio between the indicative allocation to the support of renewables, and the installed power indicator adopted in the OP. It is unclear why the amount of EUR 41.5 million programmed to help finance RES will result in only 16 MW of additional production capacity in the region of Podkarpackie, while the almost exact same allocation in Łódzkie will be twice as efficient, with the indicator set at 32 MW of power, given that both regions plan the use of grants, not financial instruments. Raising the question of effectiveness of support, this also points to the need for better oversight over the quality and the values of indicators adopted in the Polish OPs.

Other concerns arise as well in the analysis of the implementation documents of the Regional Operational Programmes and particularly the project selection criteria. Regions have allocated specific sums to finance the development of specific RES technologies, in accordance with EU regulations, which give a separate category of intervention to solar, wind, biomass and other renewable energy, and the money is generally quite evenly distributed depending on a region's RES potential. Now the risk is that with cost-effectiveness as the main selection criterion, only the technologies which are already well developed, such as onshore wind, will be able to access EU support. Sustainability criteria for biomass projects are generally missing from the Detailed Descriptions of Priority Axes, although several regions do intend to evaluate the source of biomass or prioritise biogas installations which utilise organic waste to produce energy. At the regional level, the threat of big industrial biomass power plants posing risks to environmental sustainability or forest management is however mitigated by the demarcation line between ROPs and OP IE, which only allows for biomass installations of up to 5 MWth/MWe of power installed. In line with the Renewable Energy Act, energy produced from burning high quality wood or grain cannot be considered renewable, and provisions excluding such installations from obtaining EU support are quite common in the regional implementation documents.

There are also positive aspects to regional support for renewables. A majority of Polish voivodeships offer support to small-scale, decentralised RES installations, with a focus on technologies which best utilise the local potential and cause no additional pressure on the natural environment. Some few exceptions go a step further and plan dedicated financing paths for micro-installations and the generation of energy – both heat and electricity – primarily for the beneficiary's own needs. Once more, Podlaskie stands out as a region

GRAPH 19: Split of renewable energy sources by technology.
Source: *our own calculations based on approved Operational Programmes according to categories of intervention*



	in EUR
wind	173,796,628
solar	369,635,520
biomass	283,651,499
other (hydroelectric, geothermal, renewables integration)	111,845,339
Renewable Energy Sources total	938,928,986

71 Defining the Energy Potential of Polish Regions in Terms of Renewable Energy Sources – Conclusions for Regional Operational Programmes for the Programming Period 2014-2020, Institute for Renewable Energy for the Ministry of Regional Development, December 2011

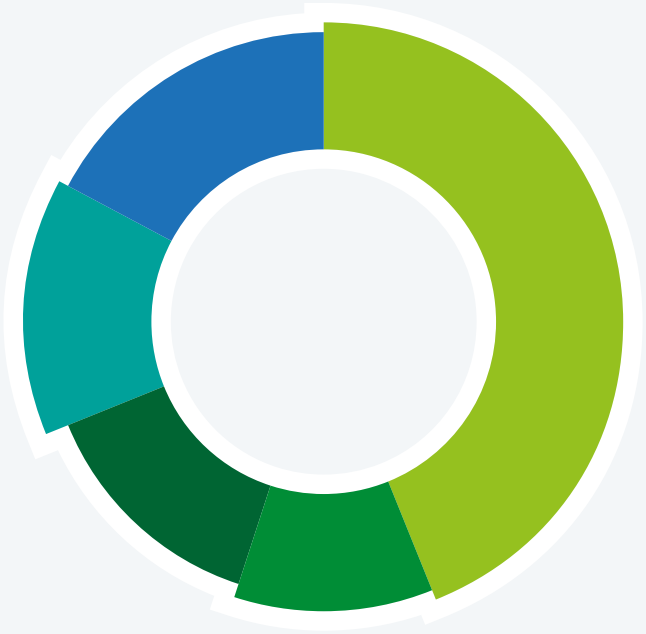
whose ROP clearly prioritises community and prosumer[72] energy projects over those purely commercial. However, the corresponding project selection criteria unfortunately do not reflect this preference. Dolnośląskie and Kujawsko-Pomorskie both build on the provisions of their Regional OPs and include micro-generation as a separate type of project in their implementation documents.

Funding for fossil fuels

Cohesion Policy funds earmarked for supporting the low-carbon economy might finance energy efficiency and help develop renewables, but in some cases they will also serve to lock the Polish energy system into the high-carbon, fossil fuel-dependent business-as-usual status quo. Polish regions especially appear not to see the obvious contradiction between on the one hand following the traditional path of extracting and burning coal while on the other hand using European money to support investments in sustainable energy. The ROP of the Lubuskie region in one sentence mentions newly discovered lignite deposits and decentralisation of energy production as development opportunities, illustrating well the internal inconsistency of many regional energy strategies.

It is interesting to note how this is also reflected at a linguistic level. Across all official documents, the Polish translation and equivalent of 'low-carbon' is 'low-emission' – an intentional measure which seems to be indirectly legitimising the continued use of more efficient and less polluting fossil fuels, under the umbrella of sustainable energy solutions.

GRAPH 20: Allocations to energy infrastructure. Source: our own calculations based on approved Operational Programmes according to categories of intervention



		Euro
44%	energy efficiency	2,501,919,373
17%	renewable energy	938,928,986
14%	CHP	787,910,436
14%	power grids	781,261,716
11%	gas infrastructure	620,000,000

Co-firing

EU funds earmarked for the low-carbon economic shift in Poland will indeed help to support coal-burning – both indirectly and directly. First, despite a clear focus on moving away from high-carbon energy generation, the controversial issue of subsidising co-firing of biomass and coal as renewable energy remains a problem. A few regions, among them Śląskie, expressly exclude co-firing installations from receiving any EU-funded support. OP Infrastructure and Environment, in its implementation document, also includes a statement on not supporting co-firing – at least under the Investment Priority on renewables. Many regions, however, avoid addressing the issue directly, not just in the OPs, but also in the implementation documents.

In the process of public consultation of many regional DDPAs, submissions were made requesting that regions include in the implementation documents a provision which would state in a definite way that co-firing installations were ineligible to obtain funding. In response, Pomorskie region promised to include in the criteria for the selection of RES projects a preference to non-co-firing installations, indirectly allowing for coal and biomass burning to be treated as renewable energy. Wielkopolskie and Zachodniopomorskie both did not provide a straight answer, noting that the European Commission agreed to support fossil fuel-run installations in 'special cases'. Such provision is indeed included in most OPs, but in relation to gas-burning high-efficiency CHP installations, and certainly not in the context of financing co-firing as renewables.

Coal burning installations

Combined generation of heat and power is only one example of how European money will be used to perpetuate the use of fossil fuels in Poland. In the implementation document of the OP IE, according to the indicators connected to the Investment Priority on high-efficiency cogeneration, only 27 out of a total of 62 CHP installations to be funded will be producing renewable energy.

Gas boilers will be financed in nearly all OPs as one of the measures in projects aiming to improve energy efficiency

72 People who produce and consume their own electricity.

in buildings. Modernisation or replacing coal-burning heating systems is often not directly excluded from support in the Investment Priority on improving energy efficiency in enterprises, with regional authorities pointing to the obligatory energy audits as sources of information of which improvements should be financed.

Małopolskie and Podkarpackie regions will use their regional OPs to directly pay for coal, by offering financial support for replacing old individual coal-burning stoves with new, more efficient and less polluting coal-based installations. The rationale here is the urgent problem of air pollution in those regions. With low prices of fuel, coal-burning stoves are said to be the cheapest option of heating individual houses and, in the short term, a quick and relatively easy fix to the air quality problem.

With the European Commission opposing financing such measures with funds allocated directly to low-carbon development, the regions found an inventive way to get their way. In Małopolskie, although the description of the area of intervention – solid fuel-burning individual heating systems – is included as an element of the Priority Axis on the low-carbon economy, the source of money will really be the Investment Priority 6e on air protection measures. In this way, replacing old, polluting coal heating systems with biomass or gas boilers receives EU money for low-carbon development, while the corresponding activity aiming at coal-burning stoves falls outside TO4. Yet, even in this case, coal-based energy generation still counts as climate action, because the funds are allocated to the category of intervention 83, with its corresponding 40% Rio Marker[73] – meaning that 40% of the money spent on burning coal in individual stoves will fall under the climate action earmarking.

Power grids

The generally bad condition of the network of power grids in Poland is mentioned routinely in the Operational Programmes as one of the threats to regional and national energy security – and as the key obstacle to the dynamic development of renewable energy sources. The grids are undoubtedly in need of modernisation. The OP Infrastructure and Environment mentions that as much as 50,000 km of medium-voltage grids and 150,000 km of low-voltage grids require urgent repairs[74]. The OP also references an analysis done by the Polish Supreme Audit Office, according to which the grid network is decapitalised by 45-65% and as much as EUR 15 billion in investments is needed to bring the existing grids up to European standards, not accounting for further development. [75]

Also in this sector, Cohesion Policy funds come to the rescue. In the 2014 to 2020 perspective, approximately EUR 780 million will support national and regional projects

73 Commission Implementing Regulation (EU) No 215/2014, March 2014
74 Operational Programme Infrastructure and Environment 2014–2020, op. cit.
75 Funkcjonowanie i bezpieczeństwo elektroenergetycznych sieci przesyłowych, Najwyższa Izba Kontroli (Supreme Audit Office), 2014

aimed at modernising and building new transmission, distribution and smart power grids. Only half of these funds – close to EUR 402 million– is expected to help the transition to a low-carbon economy by increasing the grids' capacity to integrate new renewable energy sources. The remaining EUR 380 million is allocated under TO7 and set to improve Poland's energy security, which in part means building TEN-E infrastructure and cross-border connections. Only about 13% of the total allocation, or a little over EUR 100 million will support the development of modern smart grids, said to be crucial for the better integration of renewables and building a distributed energy system based on the expected growth in the number of prosumers.

Approximately 80% of the total allocation to power grids will be invested under the OP Infrastructure and Environment, with projects pre-selected and included in a project pipeline document[76] in a non-tender procedure. Many of the planned investments set to receive financing to provide more capacities for a better integration of renewables are listed as European Projects of Common Interest. Many of them also connect directly to existing or planned coal-burning power plants, raising justified doubts about their actual purpose.

It is interesting to note who will benefit from the sizeable funds allocated to the development of electricity grids. For power transmission, it will be the Transmission System Operator, or Polish Electric Grids – a sole-shareholder company of the State Treasury. Energy distribution projects will be implemented by the five oligopolistic energy groups, or Distribution System Operators, where the state is a majority stakeholder in three companies, and holds one third of shares of another power group. Those capital groups are also the key players in the Polish coal-energy generation market, and bear much of the responsibility for the political and technological high-carbon lock-in of the Polish economy.

At the same time, as system operators, the power companies are legally obligated to maintain and modernise the power grids in their respective territories. Transmission and distribution fees set to provide funds for this very purpose account for close to half of average household energy bills. Supplemented by commercial loans readily available for big companies who have sufficient capital stock and a long-term financing horizon, those funds should be enough to cover the costs of the services provided. And yet, Poland plans to use substantial amounts of public EU money to subsidise its state-owned power companies, effectively allowing them to move investment capital from energy distribution to energy generation – which, in Poland, means burning coal. That way, the EU Cohesion Policy funds, instead of transforming, will indirectly help sustain the obsolete and polluting Polish energy system.

76 Project Pipeline for the Energy Sector, OP Infrastructure and Environment 2014 – 2020, Ministry of Economy of Poland, 2014

CONCLUSIONS AND RECOMMENDATIONS

The process of programming European funds in Poland has from the beginning suffered long delays, with some of the Operational Programmes for the 2014 to 2020 period adopted as late as March 2015, and many regions still working on finalising implementation documents and preparing project selection criteria in October 2015. Even before the disbursement of funds begins in earnest, Polish Managing Authorities must keep in mind the fast approaching mid-term review of 2017 and 2018. The review represents an opportunity to revise and improve the overall system for the implementation of EU funds – and it will be up to the European Commission to ensure the best possible climate performance of Polish OPs.

Cohesion Policy 2014-2020, in many ways a flagship initiative aiming to deliver the green goals of the EU, has the potential to help shift Poland onto a more sustainable development path and contribute to broad action to curb climate change. But without an underlying vision, even a lot of money is not enough to bring about real system change.

Despite promising signs, a lot of the transformative potential of EU funds will be lost in Poland. Looking at the big picture, when it comes to planned investments, the prevailing model still favours high-emissions transport over low-carbon solutions, hard infrastructure over natural methods of climate adaptation, tourism over biodiversity protection and, finally, traditional energy systems over innovative, decentralised solutions where energy efficiency is always put first and citizens can actively participate in shaping the energy market.

Will European money help build the right infrastructure, develop renewables and improve energy efficiency in Poland? Yes. But it will not transform the economy. For that, Poland needs a better understanding of what climate change is and long-term commitments and focused strategies to fight it. EU funds have been sustaining Poland for more than a decade and will continue to do so for at least another seven years. They are regarded by decision-makers as a resource to use to respond to current needs, and not as fuel for innovation and transformation. Without better guidance and closer oversight, Poland will continue to use EU money to realise its vision of development. And this future that Polish decision-makers envision is not carbon-neutral and climate friendly, but one where GDP growth continues to be axiomatic and external costs – both local and global – are mostly ignored.

TO DELIVER BETTER CLIMATE MAINSTREAMING ACROSS ALL EU FUNDS IN POLAND, WE RECOMMEND:

- Ensure that no investments are financed which would have an adverse impact on European GHG emissions reduction targets and strengthen the monitoring of climate performance of all projects.
- Ensure that energy efficiency is always prioritised over new energy generation and transmission projects, both on the national scale as well as locally.
- Reform the implementation system, so that all project selection criteria are adopted centrally and applied across all regions, in order to create a more equal investment environment.
- Stop directly and indirectly financing all fossil fuels and ensure the sustainability of energy use of biomass.
- Channel more investment into energy efficiency and renewables and away from non-transformational infrastructure which would result in a high-carbon lock-in of the Polish economy for decades to come.
- Insist on better progress indicators – energy saved or generated from renewables is a better illustration of low-carbon transformation than the length of constructed cycle and footpaths.
- Move allocations for low-carbon public transport outside the obligatory 15% earmarking for low-carbon transformation.
- Finally, insist on high quality partnerships, including adequate financial and technical support for civil society partners involved in the monitoring and implementation of EU funds.