

D.T2.2.1 COLLECTION OF EXISTING FINANCING MECHANISMS

POLAND Version 1 12 2018

Research work was co-financed from the funds for science in 2017-2020 allocated to the implementation of an international co-financed project.









1. General informati	on					
Name of partner	Research and Innovation Centre Pro-Akademia City of Warsaw					
Type and number of	Primary Elementary College					
schools chosen for pilots	8 0 0					
Who is the legal owner of schools	Capital City of Warsaw					
Who pays utility bills and regular maintenance for schools	Capital City of Warsaw					
What is the source for those costs	, , ,					
Who is responsible for making decisions on implementation of energy renovation projects	1. Education Office of the Capital City of Warsaw prepares budg assumptions in the area of education, sets out guidelines for district oconstruct their budgets, indicating the hierarchy of plann expenditures, determines the amount of funds that districts must plan for training of teachers, determines the actual and "standardis number" of students, 2. Treasurer of the Capital City of Warsaw defines the global amount of funds allocated for the districts for education, determines the amount of the financial support for 1 standardised student, 3. Districts' Councils divide financial resources into individual taxand educational units, and also make possible decisions on increasifunds for education over the amounts charged by the Treasurer. 4. Districts' Infrastructure Departments in the Districts' Office prepare proposals of investment tasks to be included in the 'distrannex' to the budget resolution of the Capital City of Warsaw and the Multi-Year Investment Program of the Capital City of Warsaw and the Capital City of Warsaw during the budget year together with the resulting the budget year together with the resulting changes in the Multi-Annual Investment Program of the Capital City of Warsaw. 5. Districts' Education Financing Bureaus: a) develop, at the requestion of Schools' principals, financial plans for the schools and education institutions in the scope of budget revenues and expenses, b) prepare materials for the district annex to the draft budget resolution collective draft plans in the scope of budget revenues and expenses.		s for districts of planned cts must plan standardised lobal amount termines the nt, lividual tasks on increasing rasurer. icts' Offices the 'district rsaw and the Warsaw and of the Capital the resulting apital City of of the Capital the request I educational s, b) prepare resolution -			





	and the guidelines of the Treasurer of the Capital City of Warsaw.					
	6. The opinion on the financial plan has to be given by: the Teachers'					
	Council, the Parents' Council and the School Council (if it has been					
	appointed).					
	7. The Schools' Principals have at their di	7. The Schools' Principals have at their disposal the financial				
	resources specified in the financial plan of the school. The schools are					
	the entities that announce public procurements	for investment.				
	The costs of energy renovation projects are	budgeted under the				
What is the source	'districts annexes' to the Capital City of Warsaw	budget. For instance,				
for the cost of	in the chapter 80101 of the Ursynów District	for 2018, there is a				
energy renovation	planned cost of renovation of Primary School no.	100 (7.2 M PLN). The				
	trustee of these funds is the Ursynów District Off	fice.				
Which department	The implementation of building renovation inves	stments is performed				
(sector, institution)	by schools themselves. For example, on 16/0	08/2018 the Primary				
is responsible for	School no. 109 in Warsaw has announced the pu					
implementation of	installation of 39.6 kWp of PV panels on its roof.					
energy renovation	·					
(in public buildings)						
2. Financing EE proje	ects using own funds					
	Yes	No				
	According to Warsaw Sustainable Energy Action	-				
	Plan, the budgeted investment in reducing					
	emissions in buildings (including application of					
	energy-saving lighting technologies and					
Do you have funds	renewables) is approx. 805 million euros					
in your budget	between 2016 and 2020 ¹ . Majority of these					
allocated for EE	investments are financed from the own funds of					
projects in public	the Capital City of Warsaw. According to the					
buildings	Investment Programme of the Capital City of					
buildings	Warsaw for 2018-2025, 60.1% of all investment					
	costs are financed from the own funds of the					
	city. The overall value of own funds engaged in					
	investment projects (not only in schools)					
	between 2018 and 2025 is approx. 2.6 billion					
	EUR ² .					
Do you have funds	Yes	No				
in your budget	The overall budget for investments in schools in	-				
allocated for EE	Warsaw in 2018 is 110.5 M EUR, including 92% of					
projects specifically	these costs incurred by the 18 districts of					
in schools	Warsaw ³ and the remaining part from the main					

http://www.um.warszawa.pl/sites/all/files/download_file.php?file=/sites/default/files/attach/aktualnosci/projekt_budzetu_m.st_. warszawy_na_2018.pps

Source: http://infrastruktura.um.warszawa.pl/sites/infrastruktura.um.warszawa.pl/files/dokumenty/program_inwestycyjny_- <u>zalacznik do zarzadzenia 0.pdf</u>. Reduction of emissions in buildings: 2 130 937 093,01 PLN, Reduction of emissions in buildings / application of energy-saving lighting technologies - 64 762 988 PLN, while Reduction of emissions in buildings / use of renewable energy sources: 1 263 929 112,00.

² 11.183 billion PLN, 1 EUR = 4.3 PLN, source:

^{564 708} PLN, PLN, 436 EUR 4.3 source: https://bip.warszawa.pl/Menu_przedmiotowe/budzet_polityka_finansowa_v2/budzet/2018/Budzet/Uchwala_Rady/Kompendium/de fault.htm





	budget of the cit that there is no s in schools, a reconstructions a not only the EE p				
Have you already implemented EE projects in schools using own funds	Yes 134 EE projects have been implemented in schools in Warsaw between 2015 and 2017 using own funds, with the total budget of 21 M EUR. The scope of investments include: insulation of walls, ceilings, roofs, and basements; windows and doors exchange; modernisation of heat exchange substations; modernisation of heating systems; lighting modernisation; development of modernisation documents.			No -	
3. Financing EE proj	3. Financing EE projects using credit or loan funds (debt)				
	Source (commercial bank, development bank, other) Council of	Yes Interest rate 1.85%	Repayment period 25 years	No -	
Is this kind of financing available for you?	Europe Development Bank ⁵ European Investment Bank	1.85%	25 years		
	Debenture 6 (bonds) 7	6.45%	10 years		
	European Energy Efficiency Fund (senior debt, mezzanine instruments and equity, but	Decided on a case by case basis. In principle - market rates ⁹ .	20 years		

4 38 753 928 PLN, 1 EUR = 4.3 PLN, source: https://bip.warszawa.pl/Menu_przedmiotowe/budzet_polityka_finansowa_v2/budzet/2018/Budzet/Uchwala_Rady/Kompendium/de_fault.htm

⁵ According to the announcement on contract award published in 2005 (http://www.przetargi.egospodarka.pl/67207 Zaciagniecie-Zobowiazanioa-kredytowego-na-kwote-300-000-PLN-na-okres-25-lat-w-Banku-Rozwoju-Rady-Europy 2005 2.html), the interest rate agreed was 3-month Warsaw Interbank Offer Rate (WIBOR) 3M + 0.13 percentage points. As of 26/10/2018, WIBOR 3M equaled to 1.72%. Source: https://www.bankier.pl/kredyty-hipoteczne/stopy-procentowe/wibor?rateDate=&trateChartType=3m

⁶ According to the announcement on contract award published in 2005 (http://www.przetargi.egospodarka.pl/51069 zaciagniecie-zobowiazania-kredytowego-na-kwote-517-642-979-PLN-na-okres-25-lat-w-Europejskim-Banku-Inwestycyjnym 2005 2.html), the interest rate agreed was 3-month Warsaw Interbank Offer Rate (WIBOR) 3M + 0.13 percentage points. As of 26/10/2018, WIBOR 3M equaled to 1.72%. Source: https://www.bankier.pl/kredyty-hipoteczne/stopy-procentowe/wibor?rateDate=&rateChartType=3m

⁷ Source: https://obligacje.pl/pl/obligacja/WAW0922

⁹ The interest rate depends on the risk structure of the investment (counterparty and technology risk). Source: https://www.eeef.eu/faq.html





also leasing			
structures and			
forfeiting			
loans) ⁸ National Fund	2%	1E voors	
for	Z /0	15 years	
Environmental			
Protection and			
Water			
Management,			
priority			
programme			
"Improving air			
quality. Part			
5: Public			
utility			
buildings with			
a higher			
energy			
efficiency			
standard" - loans ¹⁰			
Regional Fund	1-3%,	10-15 years	
for	depending	10-13 years	
Environmental	on the		
Protection and	applicant		
Water	type		
Management in	-31		
Warsaw -			
Programme OA-			
2			
"Modernisation			
of electrical			
lighting" ¹¹	4.30/	40.45	
Regional Fund	1-3%,	10-15 years	
for Environmental	depending		
Protection and	on the applicant		
Water	type		
Management in	сурс		
Warsaw -			
Programme OA-			
1 "Reducing			
emissions of			
pollutants into			
the air,			
reducing heat			

⁸ The minimum project size is EUR 5mn (range of EUR 5-25mn). Source: https://www.eeef.eu/faq.html

¹⁰ The interest rate is 3-month Warsaw Interbank Offer Rate (WIBOR) 3M, but no less than 2%. As of 26/10/2018, WIBOR 3M equaled to 1.72%. Source: https://www.bankier.pl/kredyty-hipoteczne/stopy-procentowe/wibor?rateDate=&rateChartType=3m

 $^{^{11}}$ 20% of the loan can be redeemed (grant provided by the Fund). Source: $\frac{\text{http://wfosigw.pl/strefabeneficjenta/programy2018/JST/OA_2}}{\text{beneficjenta/programy2018/JST/OA_2}}$





consumption and the use of renewable energy sources**** Yes					
Pes Yes, the main debt instruments which will continue to be used by the Capital City of Warsaw are two credit lines: at the Council of Europe Development Bank and at the European Investment Bank. According to the Investment Programme of the Capital City of Warsaw for 2018-2025, 19.9% of all investment costs are going to be financed from bank loans and credits. The overall value of debt financing engaged in investment projects (not only in schools) between 2018 and 2025 is approx. 0.9 billion EUR ¹³ . Have you conducted EE project in schools financed by credits and loan funds. The scope of projects is similar to those financed from own funds and includes: insulation of walls, ceilings, roofs, and basements; windows and doors exchange; modernisation of heat exchange substations; modernisation of heating systems; lighting modernisation. 4. Financing EE projects using grants, subsidies or other incentives Yes Source (national, EU funds, other) Regional Operational Programme of Mazovia No No No No No No Maxaw are two credit lines: at the Council of Europe Development Bank and at the European Investment Programme of Warsaw for Other Investment Programme of P		and the use of renewable energy			
Continue to be used by the Capital City of Warsaw are two credit lines: at the Council of Europe Development Bank and at the European Investment Bank. According to the Investment Programme of the Capital City of Warsaw for 2018-2025, 19.9% of all investment costs are going to be financed from bank loans and credits. The overall value of debt financing engaged in investment projects (not only in schools) between 2018 and 2025 is approx. 0.9 billion EUR ¹³ . Yes The City of Warsaw has conducted EE projects financed by credits and loan funds. The scope of projects is similar to those financed from own funds and includes: insulation of walls, ceilings, roofs, and basements; windows and doors exchange; modernisation of heat exchange substations; modernisation of heating systems; lighting modernisation. 4. Financing EE projects using grants, subsidies or other incentives Yes Source (national, EU funds, other) Regional Operational Programme of Mazovia No Source (national, EU funds, other) Regional Programme of Mazovia			Yes		No
Have you conducted EE project in schools financed by credits and loan funds. The scope of projects is similar to those financed from own funds and includes: insulation of walls, ceilings, roofs, and basements; windows and doors exchange; modernisation of heat exchange substations; modernisation of heating systems; lighting modernisation. 4. Financing EE projects using grants, subsidies or other incentives Yes No Source (national, EU % grant per project funds, other) Regional Operational Programme of Mazovia No maximum grant per project project 15 Is this kind of	to invest in EE projects in schools	continue to be Warsaw are two Europe Developr Investment Bank Programme of t 2018-2025, 19.9 going to be fit credits. The ovengaged in inveschools) between	used by the credit lines ment Bank ark. According the Capital Common of all inversall value estment project 2018 and 2	te Capital City of at the Council of at the European to the Investment City of Warsaw for estment costs are a bank loans and of debt financing jects (not only in	-
Have you conducted EE project in schools financed by credits and loan funds. The scope of projects is similar to those financed from own funds and includes: insulation of walls, ceilings, roofs, and basements; windows and doors exchange; modernisation of heat exchange substations; modernisation of heating systems; lighting modernisation. 4. Financing EE projects using grants, subsidies or other incentives Yes Source (national, EU funds, other) Regional Operational Programme of Mazovia Max. amount of grant per project No No Max. amount of grant per project Forgramme of Mazovia			Yes		No
4. Financing EE projects using grants, subsidies or other incentives Yes No Source Grant rate Max. amount of grant per project funds, other) Regional Operational Programme of Mazovia No maximum grant per project project 15 Is this kind of Mazovia	EE project in schools financed by credit or loan funds	financed by cred of projects is sim funds and includ roofs, and bas exchange; mod substations; mod	dits and loan nilar to those les: insulation sements; will ernisation of dernisation of the sements at les and the sements at less	funds. The scope financed from own of walls, ceilings, ndows and doors of heat exchange	_
Source (national, EU funds, other) Regional Operational Programme of Mazovia Source (funds, amount of grant per project grant per project grant per project project project funds. Amount of grant per project funds. Amount of grant funds. Amount of grant per pr	4. Financing EE proje			other incentives	
(national, EU funds, other) Regional 80% Operational programme of Mazovia (national, EU grant per project 80% No maximum grant per project project 15			Yes		No
for you? Voivodship 2014-2020 (European Regional Development Fund, regional level), Measure 4.2	financing available	(national, EU funds, other) Regional Operational Programme of Mazovia Voivodship 2014-2020 (European Regional Development Fund, regional level),	%	grant per project No maximum grant per	-

 12 25% of the loan can be redeemed (grant provided by the Fund). Source: $\frac{\text{http://wfosigw.pl/strefa-beneficjenta/programy2018/JST/OA_1}}{\text{beneficjenta/programy2018/JST/OA_1}}$

http://www.um.warszawa.pl/sites/all/files/download_file.php?file=/sites/default/files/attach/aktualnosci/projekt_budzetu_m.st_. _warszawy_na_2018.pps

¹³ 3.7 billion PLN, 1 EUR = 4.3 PLN, source:

¹⁵ The total allocation for the Measure 4.2 is 123,541,043 euro. The Measure provides financing to EE improvements public buildings, residential buildings and CHP.





efficiency ¹⁴		
[status as of October 2018: no open call]		
Infrastructure and Environment Operational Program, Measure 1.3.1 Supporting energy efficiency in public buildings (Cohesion Fund, national level) ¹⁶ [status as of October 2018: no open call]	85%	No maximum grant per project
ELENA - European Local ENergy Assistance ¹⁸ [status as of October 2018: open ongoing call]	90%	In principle, there are no specific limits ¹⁹ .
National Fund for	40%	In principle, there are no

 $^{^{14} \} ESCO-based \ projects \ are \ granted \ extra \ points \ in \ the \ proposal \ evaluation \ (source: \ \underline{https://www.funduszedlamazowsza.eu/wp-content/uploads/2018/09/szoop-2.4.pdf}, \ page \ 114)$

¹⁶The scope of the project of a comprehensive energy modernization of the building must result from the energy audit carried out and lead to a reduction of at least 25% of final energy consumption. Source: http://poiis.nfosigw.gov.pl/skorzystaj-z-programu/zobacz-ogloszenia-i-wyniki-naborow-wnioskow/wspieranie-efektywnosci-energetycznej-w-budynkach/art,1,1-3-1-wspieranie-efektywnosci-energetycznej-w-budynkach-uzytecznosci-publicznej-konkurs-ii.html

¹⁷ The total allocation for the Measure 1.3.1 is 348,521,647 euro. The beneficiaries eligible for finding are: state budgetary units (legal form - code 428), universities (legal form - code 044), government administration and supervised or subordinate to it organs and organizational units (legal form - code

^{401, 402, 406, 428, 132, 165),} entities that provide energy services within the meaning of Directive 2012/27/EU, acting for state budgetary units, higher education institutions and public authorities, (legal form - code 019, 023, 115, 116, 117, 118, 120, 121, 124). Source: http://www.pois.gov.pl/media/62555/sz00P_POIS_v_8_4.pdf

¹⁸ Source: http://www.eib.org/en/products/advising/elena/index.htm

¹⁹ The instrument provides funding to develop, mobilise financing and implement a clearly identified Investment Programme. Costs related to the Investment itself e.g. hardware investments, detailed design, permits, etc. should be borne by the project and cannot be supported by ELENA. The requested assistance should be commensurate with the amount of the Investment Programme to be prepared (normally above EUR 30 million) and its potential for market replication Source: http://www.eib.org/attachments/documents/elena_faq_en.pdf





Environmental Protection and Water Management, priority program "Improving air quality. Part 6) Public utility buildings with a higher energy efficiency standard" - grants ²⁰ [status as of October 2018: no ongoing call]		specific limits ²¹ .	
Technical Assistance Operational Programme (Cohesion Fund) - Call for PPP advisory services - announced by the Polish Ministry of Investment and Development [status as of October 2018: open ongoing call]	90%	In principle, there are no specific limits ²² .	

²⁰ The program is aimed at financing the implementation of EE improvements in buildings, i.e. the reduction in the demand for non-renewable primary energy (EP) with respect to the reference building is at least 10%. The reference building should be understood as a building that meets the requirements set out in the provisions of the Ordinance of the Minister of Infrastructure regarding technical conditions to be met by buildings and their location of 12 April 2002 (Journal of Laws of 2015, item 1422), in force at the moment of submitting the application for co-financing. It is agreed that the eligible costs of the projectcalculated on the basis of an investor's cost estimate, may not exceed PLN 2,000 per 1 m² of space with regulated air temperature in the building, including the costs of project

Source:

http://nfosigw.gov.pl/download/gfx/nfosigw/pl/nfoopisy/1616/3/25/program_priorytetowy_poprawa_jakosci_powietrza_czesc_6.p_df

²¹ The minimum investment cost is approx. 232 thousand euro (1 million PLN, 1 EUR = 4.3 PLN). The budget for implementation of the program is approx. 267 million euro (up to PLN 1 129 567 thousand PLN) including 33% for grants and 66% for loans). Source: http://nfosigw.gov.pl/download/gfx/nfosigw/pl/nfoopisy/1616/3/25/program_priorytetowy_poprawa_jakosci_powietrza_czesc_6.p df

²² Source: http://www.ppp.gov.pl/Aktualnosci/Strony/Wielosektorowy_nabor_projektow_ppp.aspx





	Regional Fund for Environmental Protection and Water Management in Warsaw - Programme OA-2 "Modernisation of electrical lighting" [status as of October 2018: open ongoing call]	20%	In principle, there are no specific limits.	
	Regional Fund for Environmental Protection and Water Management in Warsaw - Programme OA-1 "Reducing emissions of pollutants into the air, reducing heat consumption and the use of renewable energy sources" sources of October 2018: open ongoing call	25%	In principle, there are no specific limits. Some limits concern the maximum unit cost of specific types of works, e.g. replacement of windows: 250 EUR /m².	
Do you have plans to invest in EE			Programme of the 18-2025, 20% of all	No -
projects in schools using this model	investment cost The overall valu			

²³ The grant is provided as a redemption of 20% of the loan. Source: http://wfosigw.pl/strefa-beneficjenta/programy2018/JST/OA_2

²⁴ The grant is provided as a redemption of 25% of the loan. Source: http://wfosigw.pl/strefa-beneficjenta/programy2018/JST/OA_1





	in investment projects (not only in schools) between 2018 and 2025 is approx. 0.9 billion EUR ²⁵ .	
	Yes	No
Have you conducted EE project in schools co-financed by grants, subsidies or other incentives	For example, in the project "Thermal modernization of public buildings in the Capital City of Warsaw", which started in 2018, PV cells, weather automation, energy-efficient lighting are installed in three schools, a nursery and Family Assistance Centre ²⁶ . The project received nearly approx. 1 million euro under the Regional Operational Programme of Mazovia Voivodship 2014-2020 (ERDF), Measure 4.2 Energy efficiency. Total value of the project is 1.6 million euro ²⁷ . The project activities include also: insulation of buildings, replacement of windows and door joinery, replacement of heating and ventilation installations, replacement of lighting for energy-efficient ones, and the use of photovoltaic cells for additional energy production.	-
5. Financing EE proje	ects using ESCO model	
	Yes	No
Is this kind of financing available for you?	The ESCO market in Poland is assessed as being at the initial stage of development, while there is a slow increase in activity in the area of EPC. The market value was estimated at EUR 10-20 million, while the potential was estimated at EUR 25-75 million (data for 2012-2013) ²⁸ . The potential beneficiaries are not familiar with ESCO instruments as well as they have also inadequate knowledge in the field of energy efficiency, technologies and standards for electricity and heat processes.	-
Do you have plans	Yes	No
to invest in EE projects in schools using this model?	-	There are no plans to use this model.
Have you conducted	Yes	No
energy efficiency project in schools financed by ESCO model ?	-	The EE projects in EE in schools in Warsaw were using only own funds,

²⁵ 3.730 billion PLN, 1 EUR = 4.3 PLN, source:

http://www.um.warszawa.pl/sites/all/files/download_file.php?file=/sites/default/files/attach/aktualnosci/projekt_budzetu_m.st_. _warszawy_na_2018.pps

²⁶ Nursery No. 44 at ul. Wejherowskiej 1, Zespół Szkół im. Piotr Wysocki at ul. Odrowąża 75, School Complex No. 84 at ul. Zwycięzców 44, Primary School No. 271 at ul. Niegocińska 2 and the Family Assistance Center at ul. Lipińska 2

²⁷ PLN 6,806,746.39, 1 EUR = 4.3 PLN, source: https://www.funduszedlamazowsza.eu/aktualnosci/warszawa-inwestuje-w-poprawe-efektywnosci-energetycznej/

²⁸ https://www.ewaluacja.gov.pl/media/60397/raport_koncowy_ESCO_ostateczny.pdf





		grants and loans.
6. Financing EE proje	ects using PPP model	
Is this kind of financing available for you?	Yes Between 2009 and 2016 in Poland there have been 18 signed PPP contracts for projects in the field of energy efficiency improvement of public buildings - with a total value of investment outlays of approx. 74 million euros. The value of investment was between 0.36 million euro (Parysów Commune) to 16 million euro (Gmina Wiązowna). All projects are implemented by local authorities. The duration of PPP projects is between 8 and 15 years ²⁹ . At the end of 2017, 31 new PPP projects were being prepared in this area, with the total value of approx. 110 million euro. Their planned duration is between 7 and 23 years.	No -
Do you have plans to invest in EE projects in schools using this model	Yes -	No There is a political decision to not to use this financing scheme in City of Warsaw.
Have you conducted energy efficiency project in schools financed by PPP (debt)	- Yes	No The EE projects in EE in schools in Warsaw were using only own funds, grants and loans.

Polish Ministry of Development, 2017 https://ec.europa.eu/energy/sites/ener/files/documents/012_1.2_michal_piwowarczyk_seif_warsaw_30-11-17.pdf

Source: