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# Comparative assessment of financial support for the implementation of SDGs 2030 by environmental criteria in the border regions of Poland and Ukraine

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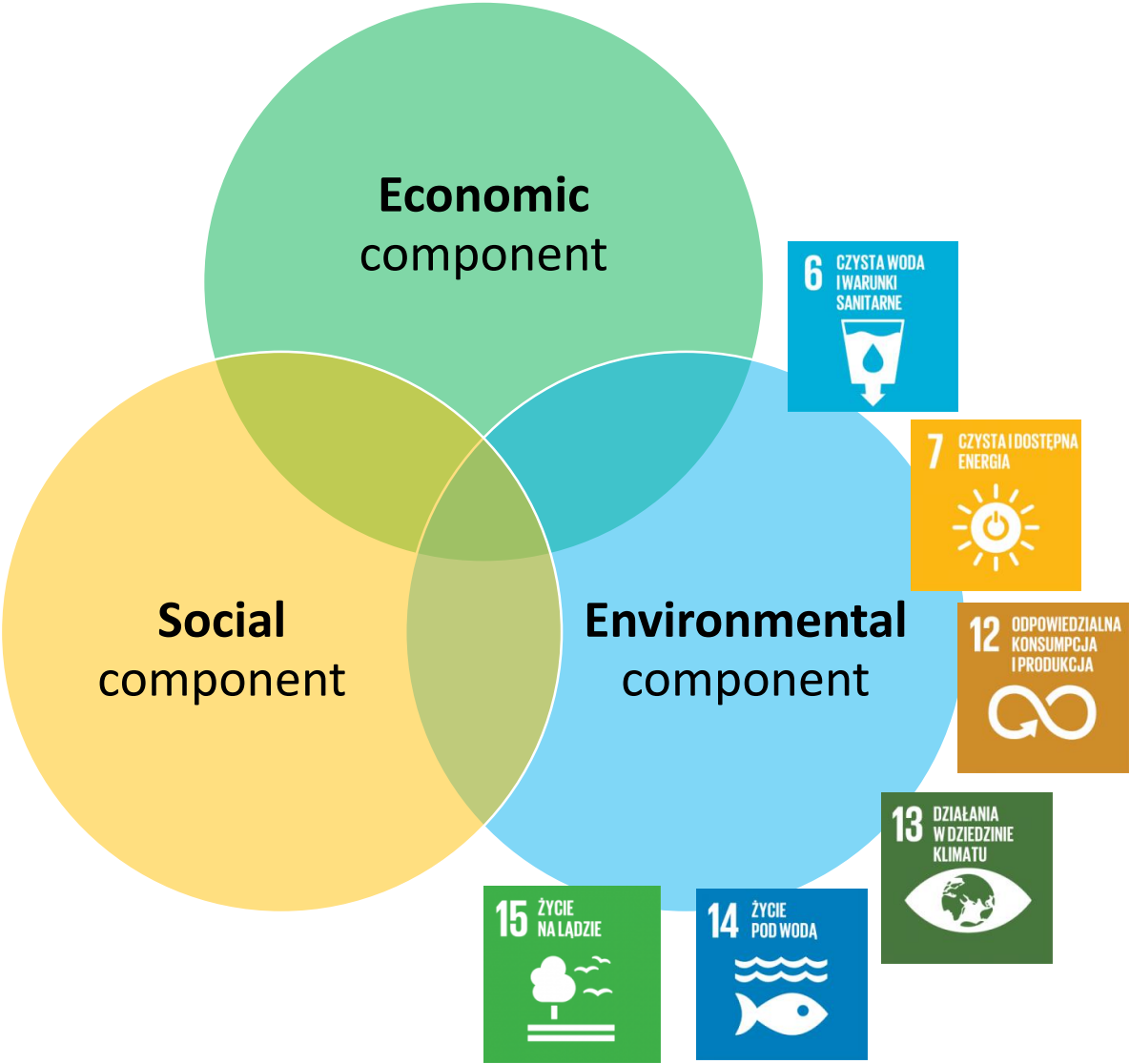
# Purpose and tasks of the study

**The aim of the study** is to conduct a comparative assessment and identify the main areas of significant deviations in the levels of financial support for the implementation of the Sustainable Development Goals 2030 by environmental component in the border regions of Poland (Lublin and Subcarpathian Voivodeships) and Ukraine (Volyn and Lviv regions).

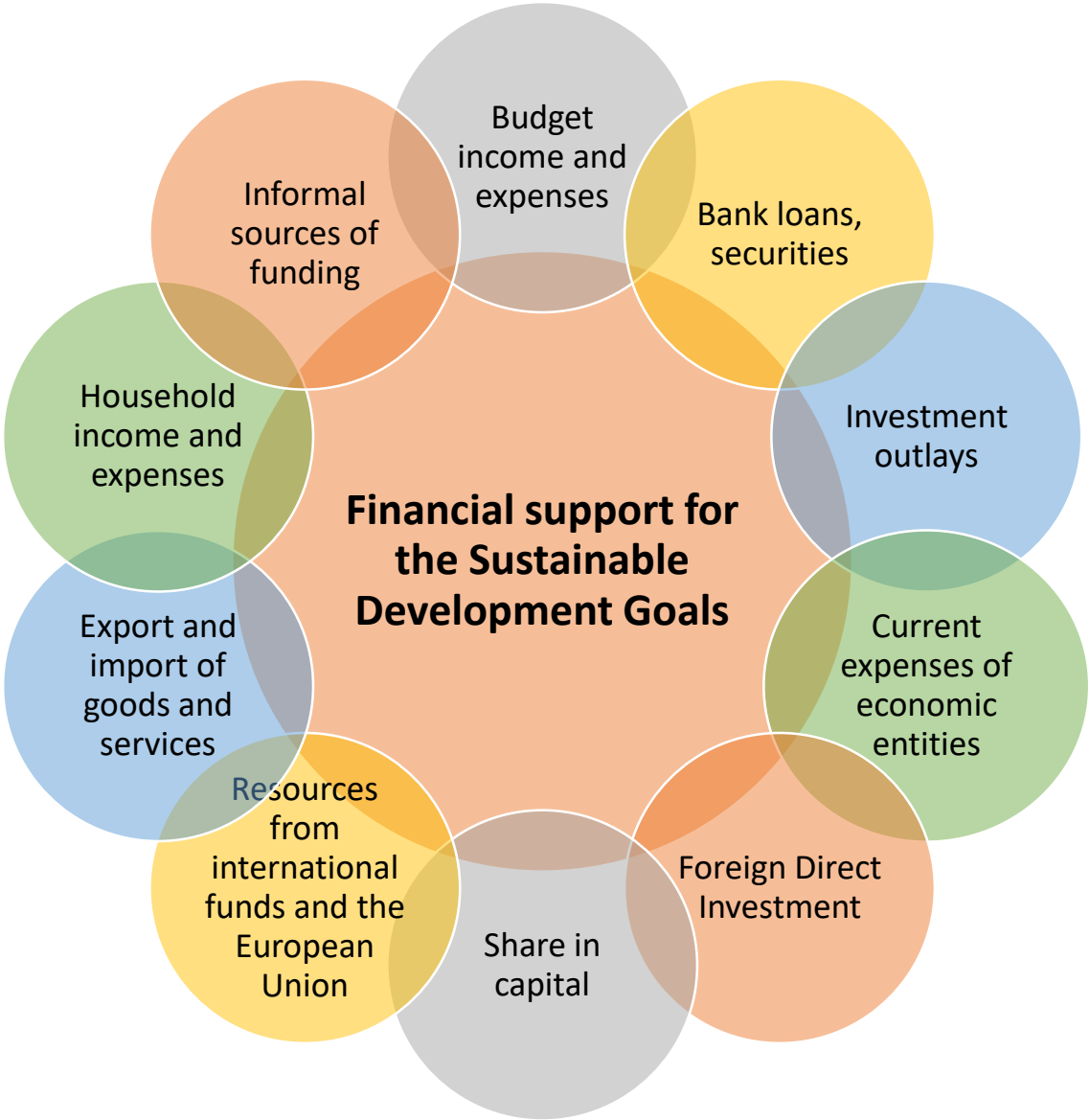
## **Research tasks:**

- identify criteria, sub-criteria and a system of multi-criteria indicators for assessing the effectiveness of financial support for the achievement of the Sustainable Development Goals by environmental component;
- developing a multi-criteria methodology for assessing the effectiveness of financial support for the implementation of the Sustainable Development Goals by environmental component;
- conducting a multi-criteria assessment based on the use of an index method based on the calculation of individual, subgroup, group and integrated indicator of the level of financial support for the implementation of the Sustainable Development Goals for the regions of Poland and Ukraine by environmental component;
- on the basis of the evaluation results, identify those Sustainable Development Goals, the implementation of which requires greater financial support in the border regions of Poland and Ukraine by environmental component.

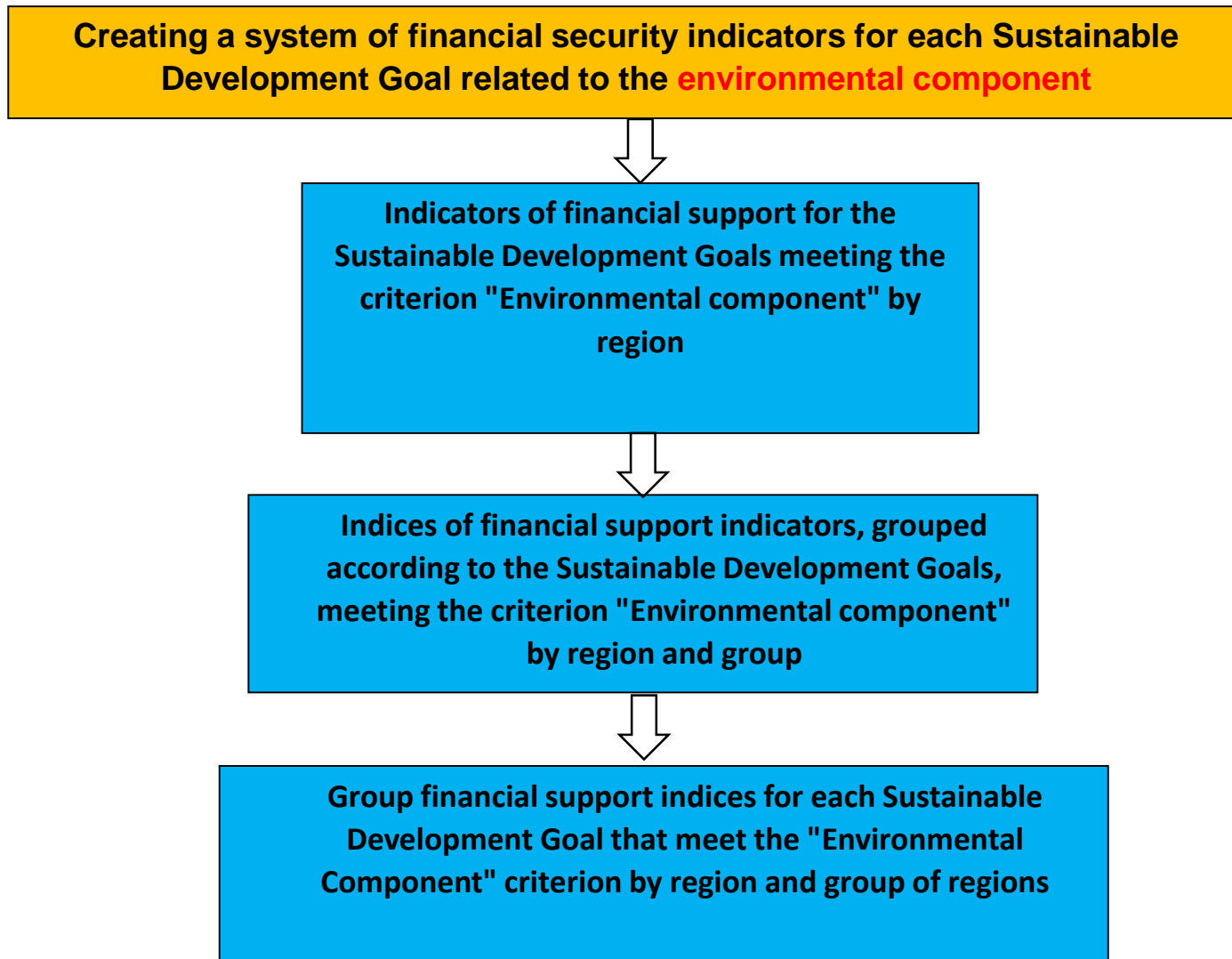
# Sustainable development as a harmony of environmental, social and economic elements



# Directions and sources of financial support for the implementation of the Sustainable Development Goals



## Method of assessing the level of financial support

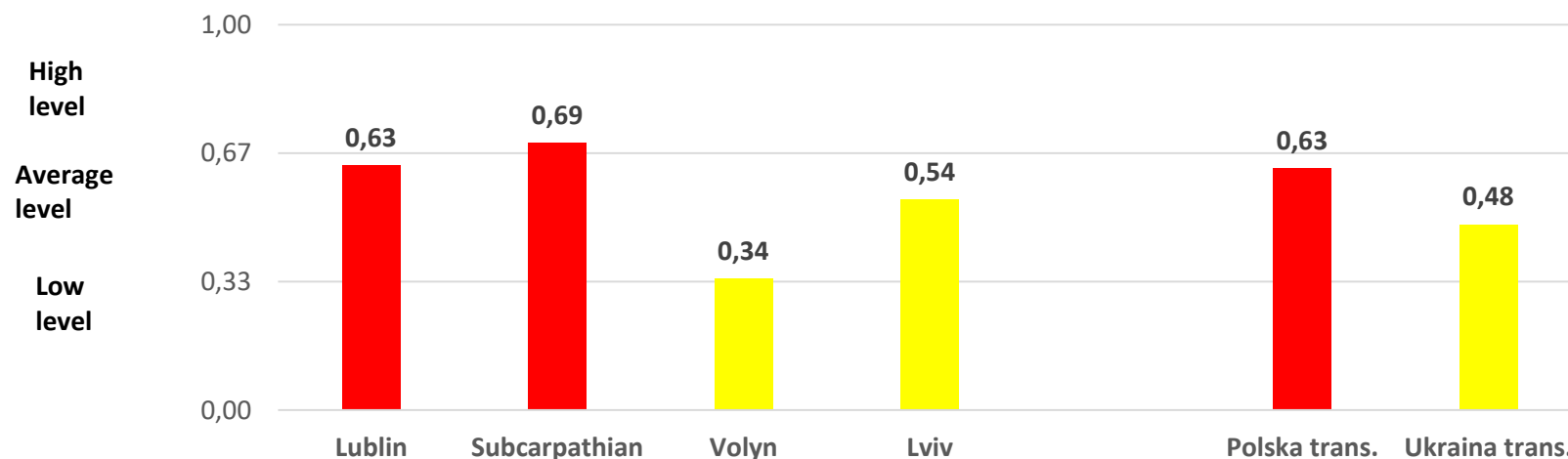


# Criteria, sub-criteria and indicators for assessing financial support for achieving the Sustainable Development Goals according to the **environmental component**

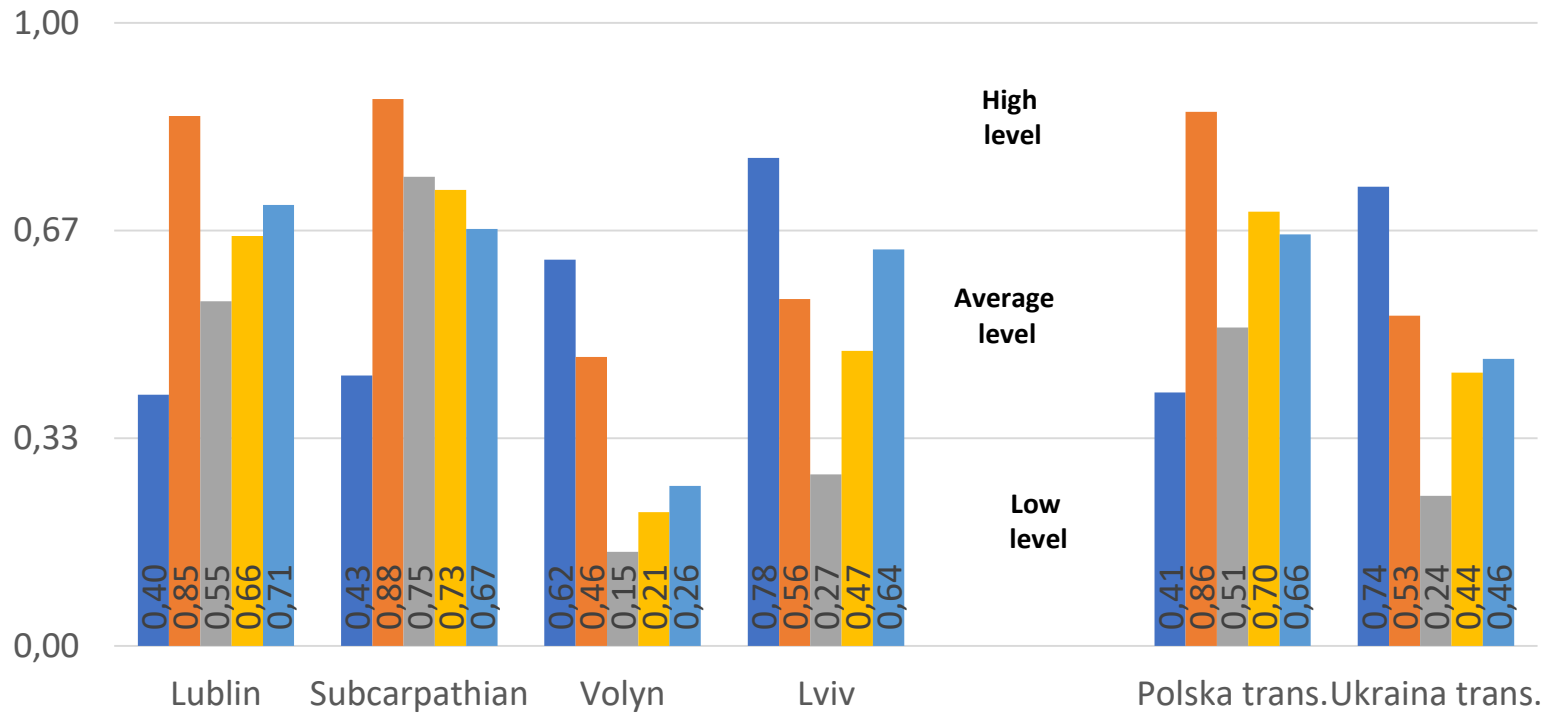
Ingredient (criteria)	Sustainable Development Goals (Sub-criteria)	Financial security assessment indicators	Orientation: stimulator (+) destimulator (-)
Environmental component	<b>GOAL 6: CLEAN WATER AND SANITATION</b>	Gross value added Water supply; sewage and waste management; reclamation on 1 Capital expenditures, international \$	+
		Environmental fees for the discharge of sewage per 1 hm <sup>3</sup> of Industrial and municipal sewage discharged into waters or into the ground, in thousands of international \$	+
		Fixed capital formation for Water treatment per capita, international \$	
		Industrial and municipal wastewater treated na 1 Outlays on fixed assets for wastewater management and water protection, cubic meters / international \$	+
	<b>GOAL 7: AFFORDABLE AND CLEAN ENERGY</b>	Share of household expenses for the use of a flat or house and energy,%	-
		Capital expenditure in Electricity, gas, steam, hot water and air conditioning supply per capita, international \$	+
		Gross value added in Electricity, gas, steam, hot water and air conditioning supply per 1 Capital expenditure, international \$	+
		Share of renewable energy sources in total electricity production,%	+
	<b>GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION</b>	Outlays on fixed assets for waste management per 1 km <sup>2</sup> of the region's area, thousand international \$ / km <sup>2</sup>	+
		Net revenues from the sale of products (goods and services). Trade; repair of motor vehicles at 1 Capital expenditure, international \$	+
		Opłaty środowiskowe na gospodarka odpadami na 1 t Odpadów wytworzonych, międzynarodowy \$	+
		Odpady nieszkodliwe na 1 Nakładów na środki trwałe na gospodarkę odpadami, ton / tys międzynarodowych \$	+
	<b>GOAL 13: CLIMATE ACTION</b>	Outlays on fixed assets for air and climate protection per 1 km <sup>2</sup> of the region's area, thousand international \$ / km <sup>2</sup>	+
		Environmental fees for air and climate protection, including CO <sub>2</sub> emissions to marshal offices 1 T Air pollutant emissions, international \$ / t	
		Share of borrowed funds (not own funds) in total expenditure on fixed assets for environmental protection,%	+
		Nakłady na środki trwałe na ochronę powietrza i klimatu na 1 T Emisji zanieczyszczeń powietrza, międzynarodowy \$ / T	+
	<b>GOAL 15: LIFE ON LAND</b>	Outlays on fixed assets for the rehabilitation of heaps, tailings ponds and waste landfills as well as other devastated and degraded areas per 1 ha of devastated and degraded land requiring reclamation, international \$ thousand / ha	+
		Outlays on fixed assets for the protection of biodiversity and landscape per 1 ha Area of special natural values legally protected, international \$ / ha	+
		Forest tax per 1 ha of forest, wooded and bushy land, international \$ / ha	+
		Investment outlays in forestry per 1 ha of forest, wooded and bushy land, international \$ / ha	+
<b>GOAL 14: LIFE BELOW WATER</b>	The regions do not have direct access to the sea		unused

# Assessment of the level of financial support for sustainable development according to the "Environmental Component" for 2017-2019

Regions	Group indexes																				Intergroup index of the level of financial support for the implementation of the "Environmental Component" 2017-2019			
	GOAL 6: CLEAN WATER AND SANITATION				GOAL 7: AFFORDABLE AND CLEAN ENERGY				GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION				GOAL 13: CLIMATE ACTION				GOAL 15: LIFE ON LAND							
	2017	2018	2019	2017-2019	2017	2018	2019	2017-2019	2017	2018	2019	2017-2019	2017	2018	2019	2017-2019	2017	2018	2019	2017-2019	2017	2018	2019	2017-2019
Lublin	0,40	0,52	0,29	<b>0,40</b>	0,89	0,83	0,82	<b>0,85</b>	0,47	0,52	0,67	<b>0,55</b>	0,55	0,76	0,66	<b>0,66</b>	0,65	0,67	0,79	<b>0,71</b>	0,59	0,66	0,65	<b>0,63</b>
Subcarpathian	0,52	0,51	0,27	<b>0,43</b>	0,93	0,84	0,86	<b>0,88</b>	0,75	0,75	0,75	<b>0,75</b>	0,89	0,64	0,67	<b>0,73</b>	0,75	0,75	0,50	<b>0,67</b>	0,77	0,70	0,61	<b>0,69</b>
Volyn	0,51	0,59	0,77	<b>0,62</b>	0,45	0,48	0,46	<b>0,46</b>	0,14	0,14	0,17	<b>0,15</b>	0,23	0,28	0,14	<b>0,21</b>	0,24	0,28	0,25	<b>0,26</b>	0,31	0,35	0,36	<b>0,34</b>
Lviv	0,70	0,78	0,86	<b>0,78</b>	0,56	0,57	0,54	<b>0,56</b>	0,24	0,26	0,32	<b>0,27</b>	0,58	0,36	0,49	<b>0,47</b>	0,78	0,56	0,57	<b>0,64</b>	0,57	0,51	0,56	<b>0,54</b>
Polska trans.	0,44	0,51	0,27	<b>0,41</b>	0,91	0,82	0,83	<b>0,86</b>	0,40	0,52	0,61	<b>0,51</b>	0,70	0,71	0,67	<b>0,70</b>	0,68	0,66	0,64	<b>0,66</b>	0,63	0,64	0,61	<b>0,63</b>
Ukraina trans.	0,65	0,73	0,83	<b>0,74</b>	0,52	0,55	0,52	<b>0,53</b>	0,21	0,23	0,28	<b>0,24</b>	0,51	0,35	0,45	<b>0,44</b>	0,53	0,40	0,45	<b>0,46</b>	0,48	0,45	0,51	<b>0,48</b>



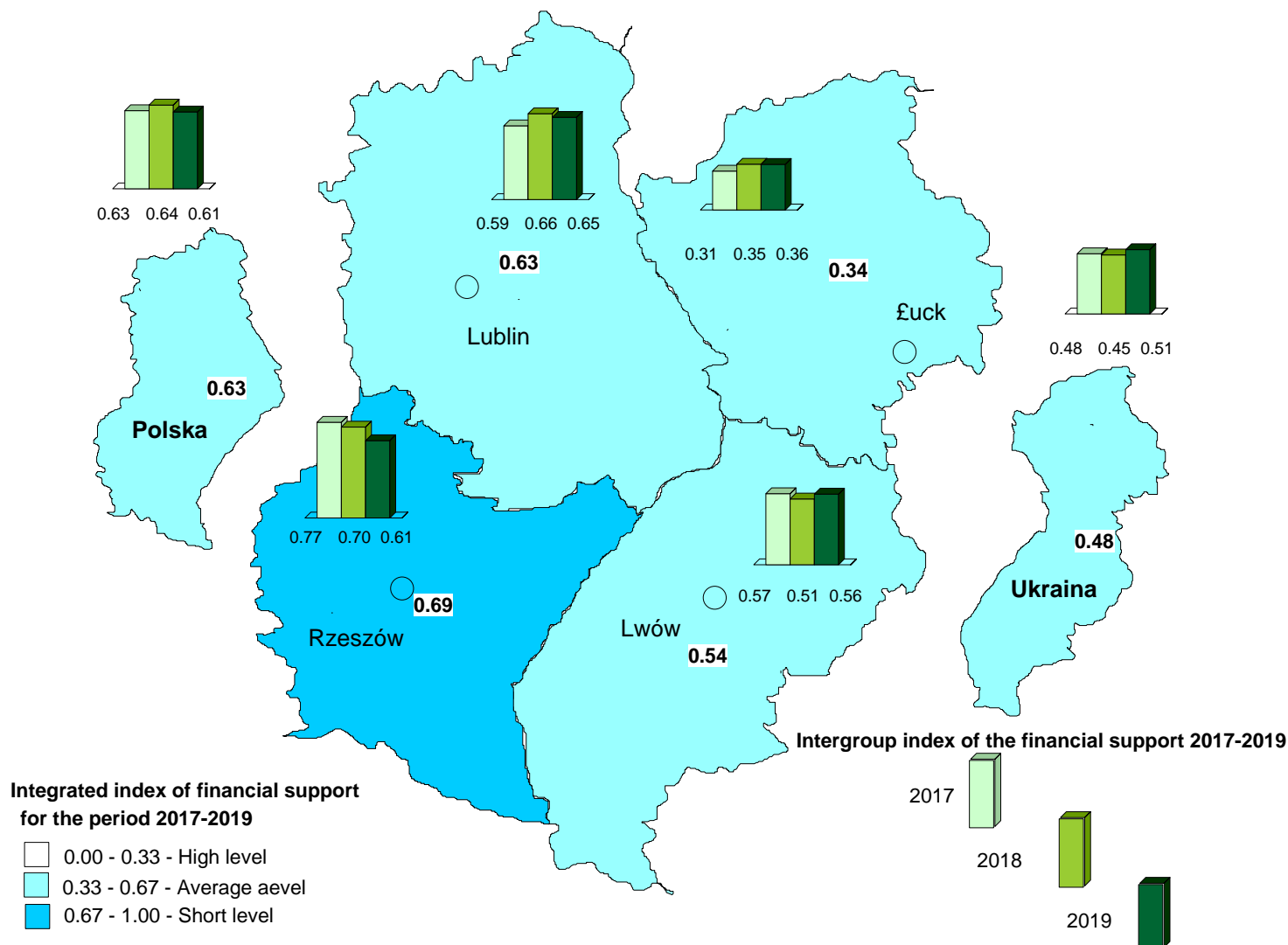
# Assessment of the level of financial support for sustainable development according to the SDGs "Environmental Component" in the border regions of Poland and Ukraine 2017-2019



- GOAL 6: CLEAN WATER AND SANITATION
- GOAL 7: AFFORDABLE AND CLEAN ENERGY
- GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION
- GOAL 13: CLIMATE ACTION
- GOAL 15: LIFE ON LAND



# Map comparing the results of the assessment of the level of financial support for sustainable development by environmental component in the border regions of Poland and Ukraine for 2017-2019.



## Conclusions

1. The system of indicators for each criterion (Goals) is selected on the basis of available statistics, which are comparable for the regions of Poland and Ukraine. Based on standardization, the transition from individual indicators to indices was made. According to each criterion, group indices of financial support are determined, on the basis of which the integrated index of financial support of the ecological component is calculated.

2. The results of the evaluation show that the border regions of Ukraine need to significantly increase funding for Goal 12, Goal 13 and Goal 15. For the border regions of Poland need to significantly increase funding for Goal 6 and Goal 12. The border regions of Poland and Ukraine need to pay the most attention to increasing the level of funding to achieve Goal 12: Responsible consumption and production. In general, the highest level of financial security was reached in Subcarpathian Voivodeship, and the lowest level was reached in Volyn Region.

3. It is concluded that at the international level it is necessary to create a sufficient information base to assess the effectiveness of financing the implementation of SDGs, the border regions of Ukraine need to attract much more additional funds for financing the environmental component of sustainable development than Poland.

**Thank You !**