

## **White and green sector of economy within Małopolska Voivodship**

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### **Summary**

**of the report commissioned by Małopolskie Obserwatorium Polityki Rozwoju at the Marshall Office of Małopolska Region in Kraków**

#### Summary

Report was commissioned by Małopolskie Obserwatorium Polityki Rozwoju at the Marshall Office of Małopolska Region in Kraków. White and green sectors of economy have been defined within the report.

White sector – positions and activities undertaken within the health care system, pharmacy, social care system, as well as at the paramedic jobs and within the medical products industry.

Green sector – positions and activities undertaken within the environment protection system, manufacturing, sales, installation, handling and servicing of equipment related to environment protection system according to Polska Klasyfikacja Statystyczna Dotycząca Działalności i Urządzeń Związanych z Ochroną Środowiska (or anything related if change within the legal system shall be enforced).

It is assumed within the report that only definition of each sector might be considered if allows to specify size of corresponding sector.

Data gathered by Central Statistical Office allow to calculate, and in certain cases to estimate, the number of employees (incl. the owners of SMEs who are at the same time employed within their businesses) at the positions and activities attributed by experts to both white and green sector. Data have been obtained by experts from the resources of Polska Klasyfikacja Działalności 2007.

It was not difficult to define and calculate the size of white sector. Positions and activities undertaken within the sector cover the names of professions in majority of the cases. In the same time, most of the activities undertaken within health care system, pharmacy, social care system, as well as at the paramedic jobs and within the medical products industry might be entirely attributed to the sector as

a whole. Unfortunately, it is not that easy to define and calculate the size of green sector. For example, some activities which are undertaken within environment protection system might be equally performed within industrial livestock (veterinary), waste management and waste storage influencing human environment, implementation of new technologies, techniques of energy savings as well as energy consumption. Therefore, it was necessary to calculate or estimate the proportion of employees involved within activities that might be attributed to green sector to the whole group of employees within the certain type activities. Finally, the size of both, white and green sector were calculated by the number of employees (incl. the owners of SMEs who are at the same time employed within their businesses) in FTE. The numbers have been calculated separately for 2008, 2009 and 2010 documenting the changes and establishing the base for further comparisons.

	Average employment (incl. employers up to 10 employees)			
	2008	2009	2010 (only Z-06)	2010 (est. SP-03)
<b>White sector</b>	88498,0	90709,1	49027,4	902900
<b>Green sector</b>	51729,4	52072,3	29864,3	49038,3

Based on the data gathered within this research project as well as other information that have been available following forecast might be developed.

Highly professionalized white sector grew up until the first signs of 2008 economic crisis. Slight regressive trend has been documented since 2009. The whole white sector is assumed to grow up further together with economic recovery. Demographic forecasts for Małopolska Voivodship, global trends, incl. changes at the common market as well as low level of saturation of medical services in Poland (comparing to EU countries incl. Czech Republic and Slovakia), implementation of new technologies within health care system indicate labour intensity and capital-intensive character of further development of the sector.

Green sector proved to be highly sensitive during the period of economic crisis. Reduction of the sector was significant. Services delivered within green sector might be therefore considered second-rate comparing to the white sector. Moreover, the size of environmentally protected areas within Małopolska Voivodship, the level of saturation the market with services connected to waste management and waste storage, economic efficiency lead to the conclusion on either low level of development or even stagnation of green sector defined by the number of employees working within

the sector. Low level of efficiency of companies and institutions within the country economy as a whole intensifies this conclusion. The changes might happen only through the increase of efficiency.

One can expect capital-intensive character of further development of the sector within the energy industry, waste management and waste storage as well as within shaping cultural human environment. Greater effectiveness of activities might be predicted within environment protection system. Therefore, green sector might be perceived as a place to implement high-tech solutions in the future.