



**SHEER WP6 Six Month Report, 13.05.2016  
Janusz Jarosławski; WP Leader**

- **Staff actively involved in the WP6**
  - Janusz Jarosławski
  - Jakub Guzikowski
  
- **Objectives expected after 6 Month:**
  - According to the objectives delineated in Task 6.1 of Work Package 6 it is expected that background levels of pollutants of interest will be determined during the first 12 months of the Project duration. In particular after 12<sup>th</sup> month of the Project results of analysis of historical data from the surrounding air pollution monitoring stations should be available. Moreover, after eight months of on site monitoring results concerning the background air quality conditions in the vicinity of well should be available.
  
- **A summary of progress towards objectives and details for each task in the last six months:**
  - According to the timetable of activities performed in the WP6, the works were focused on completing the task 6.1 and deliverable 6.1. Air pollution data from five automatic stations located from 8 to 30 km from the drilling area and operated by the authorities of Pomeranian voivodeship have been analysed. Data includes 1-hour averages of basic air pollutants (nitrogen oxides, carbon monoxide, sulphur dioxide, ozone, particulate matter, selected hydrocarbons (benzene) and meteorological parameters from these stations. One of these stations (the closest one - 8 km from our monitoring station) can be considered as regional air pollution background station. Data cover the period of 4 years, from 2012 to 2015. Reference values of basic pollutants based on above sets of data have been determined.
  - Air pollution measurement data collected within the frame of Task 3.4 of Work Package 3 and available for analysis include the period of eight months so far. Preliminary analysis of these data has been performed on a regular basis.
  - No major activity at drilling site occurred during recent months, so data collected so far at Stary Wiec have been used for calculations of background values of pollutants around this location.
  - Commencement of work on tasks 6.2 and 6.3 will be possible after collecting the data covering the drilling activities periods, which is expected in the next months.
  
- **Clearly significant results**

- Comparative analysis of available air pollution parameters from the Project's station and historical data from the region leads to the conclusion, that in all seasons conditions levels of air pollutants in the vicinity of drilling area are low regarding the air quality criteria. They are typical for the rural background conditions.
  - An episode of relatively high concentrations of air pollutants which occurred in March at Stary Wiec station was caused by the demolition works of buildings situated between the station and drilling area by machinery powered by diesel engines (about 100-200 m from the station). This proves the possibility of detecting the air pollution from the well area during favourable meteorological conditions.
  - Some air components (carbon dioxide, methane, radon) are not measured by the regional air pollution measurement network. Measured levels of these pollutants remain at relative unchanged level since the beginning of measurements campaign. Mean radon level is very low, sometimes close to zero and similar to the values reported in the literature. Concerning methane and carbon dioxide, also typical background levels of these air constituents have been observed.
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- **No publications concerning WP6 are available at the moment**

## Deliverables due at the date

<b>Table 1. Deliverables due at the date</b>											
<b>Del. no.</b>	<b>Deliverable name</b>	<b>Version</b>	<b>WP no.</b>	<b>Lead beneficiary</b>	<b>Nature</b>	<b>Dissemination level<sup>1</sup></b>	<b>Delivery date from Annex I (proj month)</b>	<b>Actual / Forecast delivery date Dd/mm/yyyy</b>	<b>Status No submitted/ Submitted</b>	<b>Contractual Yes/No</b>	<b>Comments</b>
6.1	Determination of background level of pollutants	1.0	6	IGF PAS	Report	PU	12	29-04-16	Submitted		

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<sup>1</sup>PU      Public  
 PP      Restricted to other programme participants (including the Commission Services)  
 RE      Restricted to a group specified by the consortium (including the Commission Services)  
 CO      Confidential, only for members of the consortium (including the Commission Services)

## Milestones in the reporting period

TABLE 2. MILESTONES IN THE REPORTING PERIOD							
Milestone no.	Milestone name	Work package no	Lead beneficiary	Delivery date from Annex I dd/mm/yyyy	Achieved Yes/No	Actual / Forecast achievement date dd/mm/yyyy	Comments
12	Tools for data analysis ready for use	6	IGF PAS	31/12/2015	yes		