KOBiZE
Krajowy Ośrodek Bilansowania i Zarządzania Emisjami

JI PROJECTS IN POLAND REPORT 2008-2012

EXECUTIVE SUMMARY

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Executive Summary

The National Centre for Emissions Management (KOBiZE) has elaborated a detailed analysis of the JI projects performance in Poland in the period of 2008-2012. It was based on the data and information gathered by KOBiZE which were valid on the 1st of June 2014, including the transfers from May of 2014. The main features of the projects' realization were the multidirectional changes regarding their scope, potential, performance and achievements. This detailed analysis of the JI projects in 2008-2012 in Poland, available in Polish edition with charts and tables, can be summarized with following statements:

1. **There were 38 approved JI projects in Poland and 37 of them were implemented.** One project, despite of its approval, did not start to operate and its further implementation was abandoned. Of all implemented JI projects, 6 were included into a set-aside (reserve of allowances) for approved JI projects within the National Allocation Plan for 2008-2012 (KPRU II) and 12 other projects were included into a set-aside for planned JI projects within KPRU II.

2. **Total expected GHG emission reduction** stated in the Letters of Approval (LoA) was nearly **25 M tonnes CO_2-eq** in the 2008-2012 period. This amount was structured as follows: 67% of it was the nitrous dioxide (N_2O) emission reduction achieved at four nitric acid plants, 21% was CO_2 emission reduction through the use of renewables, mainly wind energy and biogas utilization at landfill sites and pig farms, and 9% was the coalmine methane utilization. Several projects have got their Letters of Approval amended and their expected reduction amounts have been augmented.

3. **Total achieved GHG emission reduction was 21.4 M tonnes CO_2-eq.** The share of the four projects of nitrous dioxide emission reduction was 71%, wind farms – 11%, coalmine methane and landfill gas – 6% each, and agricultural biogas and others – 3% each. Most of the projects managed to achieve expected amounts of GHG emission reduction, and only a few failed when facing various technical problems. Projects' performance changed during the whole 2008-2012 period because of the implementation delays, stoppages and other obstacles which were overcome whenever possible. Thus, **this feature of performance changeability was the most characteristic** during the whole 2008-2012 period.

4. **The degree of completion of the emission reduction plan** defined as a ratio of amounts of achieved emission reduction to amounts of expected emission reduction (expressed as percentage) was **87%** on average for all the projects during the 2008-2012 period. This can be regarded as an overall degree of effectiveness of JI projects in Poland. This degree rose from 73% in 2008 to 99% in 2009 and then fell year by year down to 81% in 2012. There were different causes of this changeability and they depended mainly on external factors such as economic slow-down resulting in production decrease and less emission reduction. Projects relying on renewables had some difficulties with resources supply and a few other projects suffered from prolonging procedural delays. Internal causes which disturbed achievement of the foreseen reduction effects were mainly connected with investment and/or implementation delays, technical problems, equipment faults and stoppages due to breakdowns and accidents.

5. **Total verified GHG emission reduction exceeded 21.1 M tonnes CO_2-eq.** It was **85%** of the total expected GHG emission reduction in the period of 2008-2012 and at the same time it was 99% of the total achieved GHG emission reduction.

6. **ERU transfers amounted 81%** of the total expected GHG emission reduction and **95%** of the verified emission reduction as the transferred total was **20.1 million ERUs.**

7. **ERUs were mostly transferred** to the international companies operating on the carbon market (brokers) and to the industrial concerns, mainly German and Japanese, and in minority also to the banks. One of the purchasers was a Danish governmental agency.

8. **NAP II set-aside for approved JI projects (KPRU II reserve of 750 thousand allowances, the so called „first reserve"),** foreseen for the six approved JI projects, which reduce or limit the emissions of installations falling within the scope of EU ETS, was used in 68% by four projects. The remaining two projects resigned from applying for ERUs because of scarce emission reductions, resulting it to be unprofitable to perform the verification process. The unused allowances from the set-aside were auctioned.

9. **NAP II set-aside for planned JI projects (KPRU II reserve of 13 million allowances, the so called „second reserve"),** was not only foreseen for the planned JI projects, which reduce or limit the emissions of installations falling within the scope of EU ETS, but also for the new or changed installations or identified at a later stage. There were 12 JI projects that benefited form this reserve.

10. The diversity of JI projects in Poland seen through the analysis of their features such as type, size, economy sector etc. overlapped with their variability during the period of their functioning. Fluctuations of the achieved emission reduction were caused by individual circumstances. It is therefore difficult to identify an example of a project which would guarantee achieving 100% of the expected emission reductions. Yet, it seems that projects embracing several objects (installations) performed better because any shortage of reduction in one object could be compensated in another places. Otherwise, in case of single-object projects, any breakdown meant stoppage and total lack of reduction. However, the nitrous

dioxide abatement projects were exceptional throughout and they generated the most of benefits, thus being examples of the most effective projects. Among renewables projects, wind farms achieved relatively good results.

11. To sum up the functioning of JI projects in Poland in the period of 2008-2012, the commitment of all stakeholders to succeed should be stressed. The effectiveness of implementation of the 37 JI projects and also overcoming different obstacles resulted in achieving substantial emission reductions. This enabled ERUs generation and transfer of contracted units to foreign partners. All that proves satisfactory execution of the Joint Implementation mechanism in Poland, although the gradually decreasing ERU prices diminished and almost eradicated the economic attractiveness of such a venture. The accomplished ecological effects should be appreciated, as well as investments in new technologies and valuable experience gained during their implementation. Enterprises broadened their understanding of the possibilities of combining environmental efforts with project oriented instruments which support innovative technical solutions.

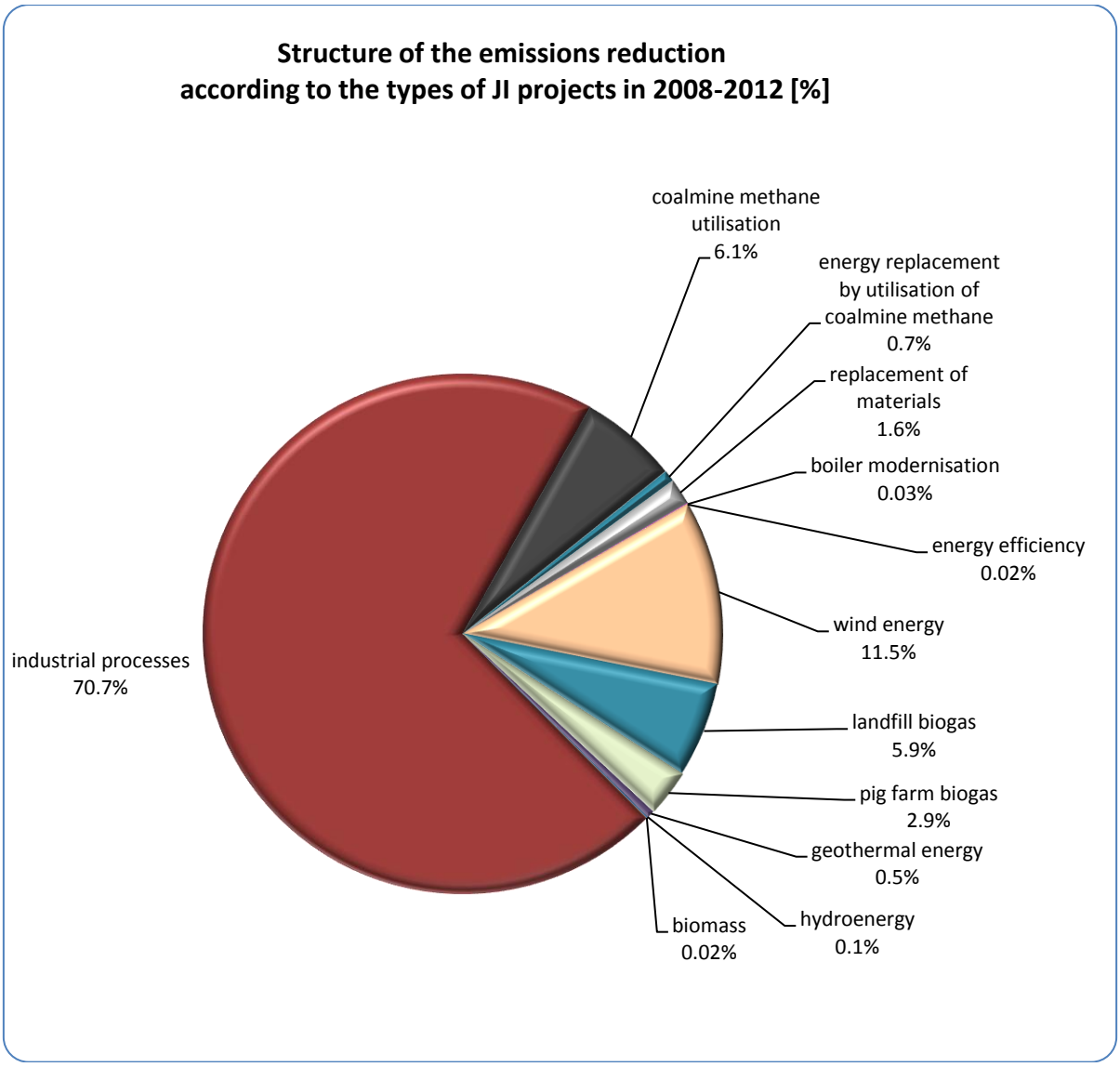
JI projects in Poland – in figures

(1st of June 2014)

Year	Amounts of emission reductions					Transfers of ERUs		
	Expected according to LoA	Achieved	Achieved in comparison to expected	Verified	Verified in comparison to expected	Transfer volume	Transfer volume in comparison to expected	Transfer volume in comparison to verified
	[tonnes CO_2-eq]	[tonnes CO_2-eq]	[%]	[tonnes CO_2-eq]	[%]	[ERU]	[%]	[%]
2008	1 970 891	1 441 896	73.2	1 420 185	72.0	1 391 880	70.6	98.0
2009	4 511 848	4 465 164	99.0	4 413 419	97.8	4 113 971	91.2	93.2
2010	5 360 378	4 961 264	92.6	4 914 254	91.7	4 730 884	88.3	96.3
2011	6 122 371	5 072 570	82.9	4 997 750	81.6	4 892 124	79.9	97.9
2012	6 831 519	5 498 275	80.5	5 379 947	78.8	4 929 017	72.2	91.6
Total	**24 797 007**	**21 439 169**	**86.5**	**21 125 555**	**85.2**	**20 057 876**	**80.9**	**94.9**

LoA = Letter of Approval

Data source and elaboration: KOBiZE



Data source and elaboration: KOBiZE