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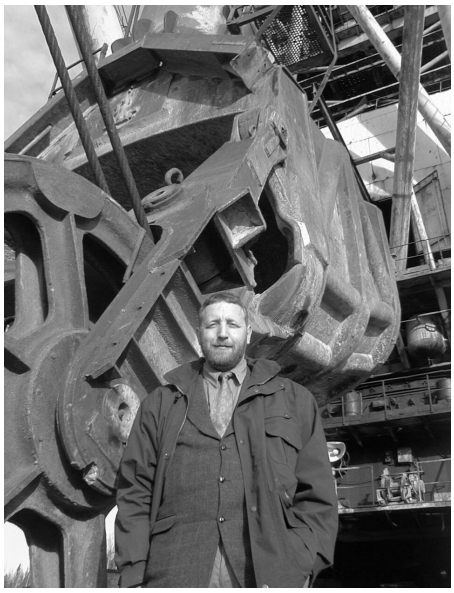
EDITOR'S PAGE

NEGATIVE ENVIRONMENTAL IMPACTS OF OIL SHALE USE ARE TO BE REDUCED



Negative environmental impacts of oil shale use, whether for electricity production in power plants or for extraction of oil, are well known, thoroughly studied and comprehensively addressed at past and present issues of our journal. To reduce negative effects of oil shale use, countries and companies as well as research institutions involved in utilisation of oil shale reserves or studying the related issues have proposed and implemented mix of policy instruments: regulations, economic instruments, research and development, education and information, investments into technology shift etc. Significant results in achieving these goals have been recently obtained by pioneering the use of the CFB boilers for oil shale combustion on large scale at Narva Power Plants Ltd. Still several problems related to semi-coke disposal and hydraulic transportation of shale ashes have to be solved via technology shift at the existing plants in order to meet the compliance with coming legislation after EU accession.

The European Union (EU) is constantly keeping in focus human health and environment quality, thus policies and measures taken in order to implement the present environmental, economic and social policies are more and more considering and integrating environmental concerns. Recent approval of the CAFE (Clean Air for Europe) Programme of EU, means largely strengthening of environmental regulations, particularly the ones concerning

emissions of harmful substances into the air. Revision of National Emission Ceilings Directive of EU is underway as well, setting limits to total annual emissions of particulates, NO_x, SO_2 and volatile organic compounds from the Member Countries far stricter than currently valid until 2010. Further limitations of SO_2 emissions are having serious impact on any industries involved in utilisation of oil shale, as emissions into the air from oil shale combustion and from refining provide currently the major share of national emission load. Besides the regulations, EU is putting special emphasis on strengthening of fiscal instruments for environment protection and for elimination of market distortions.

The Estonian Government has also understood that environmental taxation is a necessary tool to respond to the negative trends in environment quality and to the rapid exploitation of certain non-renewable natural resources and to do something about the low decoupling rate of economic growth and emissions. According to several indicator systems (World Bank Net Adjusted Savings, Environmental Sustainability Index of Yale University, Ecological Footprint etc.) Estonia's sustainability has been declining in recent years. At the same time, the Estonian government, like any government, is under constant pressure to reduce taxes that affect labour costs. These two incentives have led to preparation of the National Strategy for Ecological Tax Reform that has been approved in July 2005 and put into implementation. After Parliament's approval, new tariffs valid from 01.01.2006, for the use of major natural resources, are doubling or tripling, thus the incentive for resource users to change their production into more efficient use of raw materials is rather strong. New Act on Environmental Use as well Government Decrees stating costs for ores and water usage of different categories of ground water puts emphasis also to minimisation of the wastes, to efficient use of water and reduction of hazardousness of effluents and emissions from production processes.

Despite the measures taken in the past and in the near future, still further measures have to be taken in order to address specific concerns related to environmental burden of oil shale mining, emissions from utilisation of oil shale reserves and disposal of wastes. The current number of *Oil Shale* is trying to contribute to this mission by articles both addressing causes of problems and presenting possibilities via technological solutions to reduce the impact of this important sector on economy, thus securing viability of oil shale use for coming decades.

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