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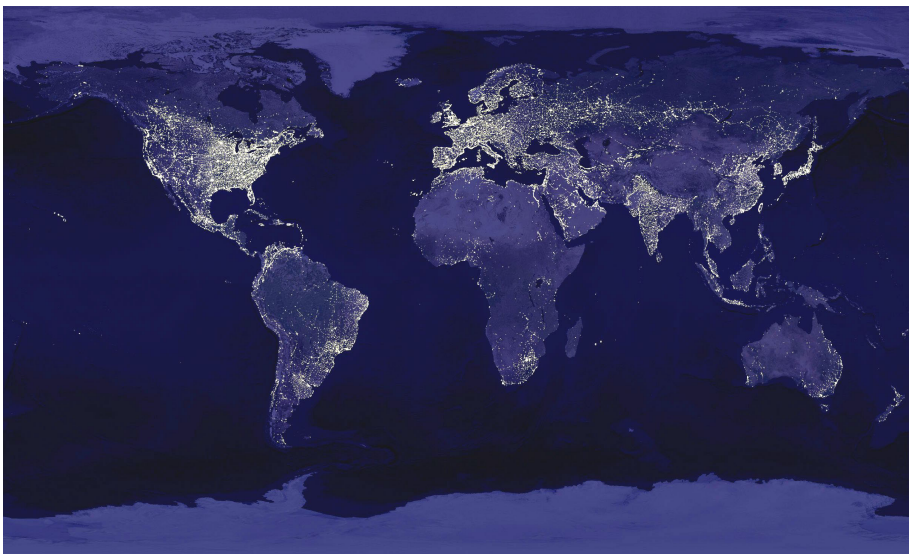
EDITOR'S PAGE

OIL SHALE – LOW GRADE BUT HIGH VALUE

If you could have a look at our planet from some distance in the dark and cloudy night, you could see the interesting illumination by the Earth's lights. You could clearly recognise the areas which are highly illuminated as the southern part of North America, Europe and South-East Asia, you could also notice the less illuminated areas up to the complete darkness. Those are man-made lights somehow indicating the extent the electrical energy is being generated in these regions.

The world's population is growing by some 75–80 million people every year. During the last 50 years the world's population has doubled. The electricity usage has become everyday part of our life; we even cannot imagine living without it.

However, this is not obvious to everybody. Nowadays about one forth of the world's population of six billion people does not have access to electrical



Our planet at night.

energy. Therefore, the need for electrical energy, in comparison with other energy sources, is growing more rapidly. It is prognosticated that by 2030 the world's energy consumption can rise almost two times.

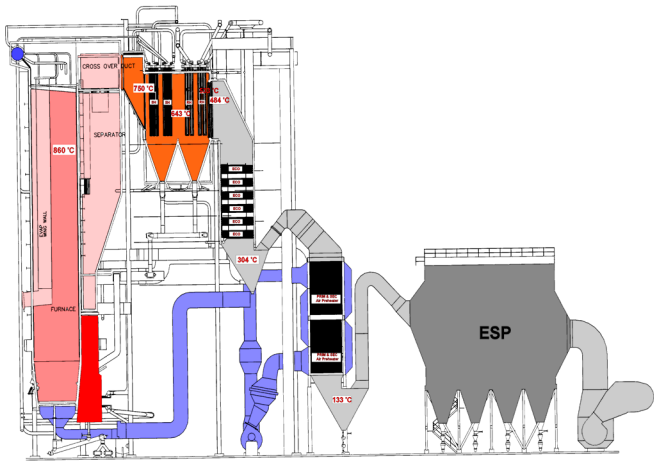
The extensive energy production forces us to utilize more and more new primary power sources; the tendency of utilization of low-grade fuels is definitely raising. Without any doubt oil shale belongs to this fuel category. Total world resources of oil shale are conservatively estimated to be at least 3 trillion barrels of shale oil, which exceed current proved oil reserves at least 3 times.

During the last couple of decades the combustion techniques have been rapidly developed, offering proper technologies for utilization of the large variety of low-grade fuels. This is very important to the countries not having their own high-quality fuels besides the low-grade ones, presenting a challenge to secure their own energy supply through power generation from domestic low-grade fuels and to minimise the national dependence on imported energy and fuels.

That has been achieved in Estonia, in the small country of 1.4 million people, having the leading role of low-grade oil shale utilization in the world. About 95% of electrical energy generated in Estonia is provided by oil shale combustion. More than 2400 MW of oil shale-based power production capacity is currently available.

The new generating capacity of two 215-MW power blocks fired by oil shale utilizing the low-temperature circulating fluidised-bed (CFB) technology, was successfully commissioned in 2005.

Both the electrical energy generation and liquid shale oil Galoter refinery process for Estonian oil shale have been completely justified, and the acquired positive experience serves as a solid foundation for ensuring the sustainability and competitiveness of the oil shale industry.



The cross-section of the Foster Wheeler's CFB boiler

The long-term experience of oil shale utilization has been turned into the valuable know-how.

This page offers an excellent opportunity to call an international audience of oil shale interests from across the world, who are interested in the development and use of fuels alternative to oil and coal, to attend the ***International Oil Shale Symposium, Tallinn, Estonia, on June 8–11, 2009***. The main topics of the Symposium are:

- Exploration and Mining
- Retorting Technologies
- Combustion Technologies
- Environment & Carbon Management
- Country & Industry Developments

Besides lectures, there will be tours into the heart of the Estonian oil shale industry including underground and open-pit mining sites, the world's largest oil shale-fuelled power plants and a shale oil retorting plant. The visitors will have an unprecedented opportunity to meet and consult the top management and experts of these oil shale utilization companies. For more information see the website ***www.oilshalesymposium.com***.

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