New pulp & paper mill by Larvik Cell in Estonia - good for economy, not for environment?

In last decade Estonia has been considerably successful among fellow transition countries in receiving Foreign Direct Investments (FDI). Local mouthpieces of the fully open and liberal economy are convincing Estonians that every single dollar invested into Estonian economy is helping to raise the common prosperity and should therefore be warmly welcomed. There is plan by Norwegian company Larvik Cell to invest into new pulp & paper mill in Kunda, North coast of Estonia, creating lots of new jobs in town of 4000 inhabitants. Which might be possible environmental impacts of that facility?

It is not the first time that Larvic Cell, a small Norwegian pulp and paper company is trying to open a specific kind of pulp and paper mill - a factory for production of the chemi-thermo-mechanical pulp (CTMP) from aspen wood in Estonia, northmost Baltic state. Operating of the factory was hoped to be started in 2001 already but plans failed in both original sites (small towns of Kehra and Türi). In Kehra the Larvik Cell faced problems with Horizon, an already operating pulp & paper company (based on Singapore capital). In Türi Norwegian developers met strict resistance from environmentalists and had to resign from their plans. Estonian environmental community (both state officials and NGOs) were strongly against the plan of installing a 40-years old equipment (originating from Denmark) which would have caused major water pollution in river Pärnu (longest river of Estonia with outlet to the Baltic Sea). Although the cost-saving plans of importing the outdated second-hand equipment to Estonia turned to be impossible, the Larvik Cell decided to continue with the pulp project. Brand new (notably BAT, best available technology) and therefore much more expensive installation is to be bought and installed in another location, most probably in small town f Kunda in North coast of Estonia.

The developer of the chemi-thermo-mechanical pulp mill is AS Estonian Cell, subsidiary of the Larvik Cell, a small Norwegian company with annual turnover of just some 20 million USD. But most probably the real force behind the project is AB Rottneros, Swedish pulp company which had annual turnover of over 300 million USD (3.38 billion SEK) in 2000. Hearing of the name 'Rottneros' makes quite some Swedish environmentalists angry as the company was reportedly involved in purchasing deciduous wood from key biotopes in Sweden few years ago. Rottneros (which by the way imports substantial amounts of Russian timber to its Swedish mills) will be granted a 10-year exclusive rights for exporting of all products from pulp mill to be constructed by Larvik Cell in Estonia. Entire investment will be around 85 million Euro and most of it will be covered by loan from international commercial banks' syndicate lead by HypoVereinsbank of Germany.
Environmental impacts

Main environmental problems that may be caused by CTMP factory are big resource need of aspen wood and electricity (which will be produced from natural gas in power plant specially built for the mill), as well as water pollution. Although new technology (arguably BAT, best available technology) will be used by Larvik Cell, air and water pollution and respective environmental fines can't be avoided. According to current estimates the pollution levels will not be too high except of exceeding the pollution limit set for chemical oxygen demand, COD. Although special wastewater treatment plant will be constructed the level of KHT in outlet to the Baltic Sea is expected to be around 1000 mg/l while allowed pollution limit set by Estonian Ministry of Environment is 250 mg/l. If the CTMP mill will be built in location of Kunda it will be located East of the town and as prevailing winds are either from West or South-West at least the citizens of Kunda will be saved from air pollution. Until some 5 years ago the town of Kunda was notoriously famous for its smoggy grey look caused by massive air pollution from local cement factory.

Lots of Estonian environmentalists are worried because of the way Larvik Cell wants to handle wastewater originating from its planned chemi-thermo-mechanical pulp mill in Kunda. After being processed in wastewater treatment plant the water will be channelled to the underground pipe which runs for more than 5 kilometres to the coast of the Baltic Sea with pipe outlet in seabed some 15 metres below surface of the water. Stream will carry wastewaters originating from the factory East, towards the Russian coasts. Hopefully the leaks from the pipe can be avoided and groundwater will be safe in Kunda region.

Planned CTMP mill needs slightly more than 300,000 m³ of aspen (*populus tremula*) wood as resource. Wood will be peeled, chopped into pieces, bleached and mixed with water. It is not yet known if the project developers are still planning to open plantations of fast growing hybrid aspen (crossbreed of *populus tremula* and *populus tremuloides*) as resource for the mill. Hybrid aspen is not naturally growing in Estonia and as alien species it may cause damaging changes to the forest ecosystems. Knowing large volume of illegal timber trade in Estonia the Estonian Fund for Nature (affiliate to WWF) urged Larvik Cell to guarantee environmentally friendly origin of timber used as raw material.

Series of environmental assessments for production technology, location of the CTMP mill and Strategic Environmental Assessment (SEA) are underway. Project developers from Larvik Cell want to come to final decisions about planned mill by the Summer of 2002.

**Does it make sense economically?**

Economic viability of the Kunda pulp and paper mill is not at all sure. For at least a decade the idea for construction of a big pulp and paper mill has been in parallel circulating in all three Baltic States - Estonia, Latvia and Lithuania. Instead of cooperating between three small and relatively poor countries for construction of one pulp and paper mill together all three are at the moment developing plans their own factories. The situation is somewhat similar to that of the oil ports in Easterns coast of
the Baltic Sea. In Russia, Estonia, Latvia and Lithuania massive investments go into oil handling facilities and because of the crazy competition the possible carrying capacities of the oil ports are already far exceeding even potentially available oil volumes and all ports are facing financial losses in long run. In case of pulp and paper mills Latvians are to open their large factory first. Together with big Nordic forestry companies Södra and Metsäliitto the Government of Latvia is partner in the pulp and paper mill. Environmentalists keep their critical and close look to the pulp and paper projects in all three Baltic States.

Developers of the pulp mills in all three countries plan to import certain part of the timber. As planned mills are of rather large size the competition for wood may make the business not that profitable for companies managing those mills. The main reason for Nordic companies for investing into projects in Baltic States - well educated and yet rather cheap labour - will not stay that cheap forever. It is more than probable that in case of financial problems investors like Larvik Cell will request special treatment and assistance from host governments in order to avoid massive losses of jobs in their factories. At the same time it is good that Norwegian company Larvik Cell is planning to construct their factory (and about 80 new jobs) in countryside. Up to this moment foreign direct investments are heavily concentrated in Tallinn region which has received total 55% of foreign investment.