


Enhanced Oil Recovery (EOR) - Ivanic-Grad, Croatia	
Keywords	CO2 savings for EOR and CCS
Pictures	
Objectives	<p>CO2 used for the purposes of Enhanced Oil Recovery (EOR) is an ideal first step in the development of Carbon Capture and Storage (CCS). The Ivanic oil field, discovered in 1963, is situated in the Sava depression, close to Croatian capital of Zagreb. INA is a national oil company which operates all over Croatia including Ivanic and Zutica oilfields.</p> <p>Pilot project in Ivanic-Grad: restrain decline of oil production in Ivanic. Initial EOR Concept comprises CO2 injection, CO2 captured at Molve and transported by pipelines to Ivanic with a view to enlarge oil production and reduction of carbon emissions. The success of this Project will increase Croatia's recoverable oil and reduce greenhouse gas emissions through the use of carbon sequestration.</p>
Description	<p>The purpose of this project is to support the overall national goal of reducing the CO2 emission, which is one of the important issues of ecological changes and pollution.</p> <p>The goal of this project is to identify key development challenges and identify new business activities.</p> <p>The project deals with technical, technological, economic and socially sustainable possibilities which will create the preconditions for minimizing the risk of emission increase, with simultaneous realization of positive business results.</p> <p>Action – we have to think about:</p> <ul style="list-style-type: none"> - evaluating the use of CO2 for EOR for significant reductions of carbon emissions - the need to recognize the economic case for recovering conventional oil from existing fields - EOR operations using CO2 – in operation and planning - the basis for evaluating CO2 for EOR: cost of delivered CO2, oil price, capital costs for implementing a CO2 flood, production costs for incremental oil, taxation structure... - current mechanisms existing now to encourage CO2 for EOR - condition discouraging the use of CO2 for EOR, significance of delivered CO2 price for EOR - nature of the economic gap between CO2 – EOR project & alternative oil field investment options.
Results / Achievements	<ul style="list-style-type: none"> - improvement of energy efficiency (short and long term measures) - ecological benefits and time scale of EOR project - possibilities for financing and co-financing by EU-pre-accession funds - possibilities for technological cooperation within energy sector - inclusion of INA to European market with CO2 shares - possibilities for INA to buy CO2 shares on EU ETS market
Friendly advice for replication	<p>In addition to the economic success and the important contribution against global warming, the Project had another positive effect; it underscored just how forward-looking and strong the Croatia economy is – which sends out a clear signal on Croatia's way to become an EU Member Country.</p>
Online information	<p>www.ina.hr</p>
Contact	<p>Contact person: Name Mr. Dubravko Novosel Organisation INA d.d., National Oil Company Tel 00385 1 2834 900 E-mail dubravko.novosel@ina.hr Website www.ina.hr</p>