

The final goal of this joint project is to provide new tools for the efficient management of energy resources, with special focus on natural gas networks. With this goal in mind, this project would build upon the transfer of knowledge and generation of synergies between the research groups on natural gas optimization at Norwegian University of Science and Technology and University of Santiago de Compostela.

The combination of the mathematical programming techniques already developed by the groups involved in this proposal might lead to the developing of new optimization algorithms, allowing for extra functionalities and better performance.

In turn, these algorithms could then be used to gain insights on crucial aspects in the energy networks such as the design and timing of expansions, efficient routing of gas flows, economic incentives faced by the different agents of the system and interaction of the gas energy market with other energy markets such as renewable energies, oil and coal.