In the recent years, both Spain and Norway have been known for their investments in renewal energies, with the former leading in solar energy and wind power and the later in hydropower. Further, they have been increasing their dependence on natural gas: Norway as a producer and exporter and Spain as an importer.

In this situation, the efficient management of the natural gas system along with its integration with the renewal energies is a key ingredient for a sustainable development of the respective energy sectors. To this aim, it is crucial to develop models of mathematical optimization that can determine how natural gas should be routed or what network expansions are needed so as to meet important goals such as ensuring minimum gas quality at delivery points, minimizing the gas transportation costs and guaranteeing security of supply.

The core of this project is the transfer knowledge and generation of synergies between the groups in NTNU University (Norway) and the University of Santiago de Compostela (Spain). The former being a leading center on gas networks optimization and the latter having been successfully developing models in the field for two years now