

## **Support provided by the Spanish NAMA Platform to the High integration Wind Program of Uruguay within the NAMA Registry.**

A cooperation framework has been established to support the development of this NAMA with a view to provide to Uruguay the deliverables of its Program for a full analysis of the electric transmission system expansion with high levels of wind power.

This NAMA development, embedded in a public-private cooperation, builds upon different support programs including from the Spanish Agency for International Development Cooperation (AECID) on the promotion of renewable energy and energy efficiency use in Uruguay, including activities such as those from (a) to (k) as described in section A.3 of the NAMA:

- a) Review of successful experiences in countries that already have a high integration of wind power;
- b) Analysis of existing regulations in Uruguay and identification of rules to be developed;
- c) Cooperation in the development of appropriate grid codes;
- d) Identification of critical scenarios that should be considered when making the system transmission planning studies;
- e) Tools for network studies, wind farms static modelling static and criteria and parameters for dynamic modelling;
- f) Development of studies and analysis of results;
- g) Critical analysis of the expansion plans of the Uruguayan electric system, according to the results obtained;
- h) Capacity analysis of the electric system to meet the demand peaks and fluctuations in wind generation;
- i) Analysis of existing tools in the world and in Uruguay regarding weather and wind generation forecasts;
- j) Review of operational planning methodologies in countries with high wind power integration. Critical analysis of operational planning system in Uruguay and identification of changes to be made to integrate high levels of wind generation;
- k) Visit to control and dispatch centers from systems with high wind integration in Spain. Capacity building regarding operation and system dispatch with high levels of wind integration.
- l) Analysis of the state of play of wind energy technologies and forecast of its future evolution.