ANNEX 2
Best practice Identified and transferred

Section	Indication of content
1. **Title of the best practice**	Three-phase photovoltaic system, with the support of wind energy to diversify energy supply.
2. **Precise theme/issue tackled by the practice.**	Valadillo is a single-phase installation, fed for a field of photovoltaic panels, that used a regulating equipment to provide electricity within the correct parameters. Afterwards the need to enlarge the installation was apparent, for which came the idea of a three-phase photovoltaic installation, supported by wind energy to diversify the source of energy, in such a way that the installation produced a reasonable quantity of enclosed energy in days of low solar radiation. This installation, moreover, sees complemented with a diesel generator to support the system in the case of faults, maintenance or any other contingency that it could make useless the PV+eólico system.
3. **Objectives of the best practice.**	-Self-consumptionAutoabastecimiento. -Reduction in usage of diesel generator -Reduction in Pollution. -Financial savings.
4. **Location.**	- Spain. - Cabezas Rubias del Puerto (Ciudad Real).

5. **Detailed description of the best practice.**	- Origin. Power supply from renewable energy. - Timescale. Operational start-up year: **2006.** - Bodies involved / implementation. Private. - Process and detailed content of the practice. Turbine Proven WT2500. - Legal framework. - Financial framework. Initial Investment **110,000 €** Payback **14 years** There are at present for this type of installations grants in some autonomous regions, which allow a better penetration of this type of system, especially in rural areas. The value of the grant will support 30-40% of the cost of the installation..
6. **Evaluation**	- Possible demonstrated results (e.g. through indicators). - Possible success factors The benefit of this type of installations is notable, especially in rural areas where connection to the gird is unviable. In these cases, Renewable Energy is a great option. This type of installations has a great future for generating employment, not only in installation but also in maintenance. - Difficulties encountered. •Lack of environmental awareness. • The main problem to choose for this type of installations is the final cost for the user. The public administrations have launched ambitious programs of grants .With the course of the time, they will be beginning to reduce to costs and possibly in the future it won't be to necessary to apply

	incentives in order that it continue developing. • Lack of knowledge and scepticism for the technology. The only issue encountered is that of vandalism and theft..therefore adequate protection and security measures should be undertaken for any such installation.
7. **Lessons learnt from the best practice**	- Using new technologies to obtain electricity from renewable energy. - Economic savings that improve standard of living. - Concern for the environment to minimize contamination.
8. **Contact information**	Solar del Valle SL Enrique Marín Fernández Address: Pol.Ind. Dehesa Boyal, nave 32. CP 14400 (Pozoblanco, Córdoba) Tlf: +34 957 771720 e-mail: emarin@solardelvalle.es
9. **Other possible interesting information**	- Various documents (reports, presentations, etc.) 

	 Wind Speed (m/s) **4.3** Power Capacity (kW) **12.4** Production (MWh year) **15** CO2 avoided (CO2 ton/year) **6.5** Connection grid Hybrided with photovoltaic
10. **Best practice transferred**	15/02/2010