



CEDR 2019 Renewable Energy in Road Infrastructure FINAL CONFERENCE - 24 October 2023





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Dissemination

- "Meta-Parametrization of Photovoltaic Module Technologies for a Comprehensive Evaluation of Solar Energy Projects in Road Infrastructure," 2023 IEEE International Conference on Environment and Electrical Engineering and 2023 IEEE Industrial and Commercial Power Systems Europe (EEEIC / I&CPS Europe), Madrid, Spain, 2023. *
- Paper based on D2.3, entitled: "A methodology for optimal placement of energy hubs with EV charging stations and renewable generation", authored by Michele Garau and Bendik Torsater, submitted to Elsevier Energy.
- "Estimation of environmental impacts from renewable energy technologies for application in a MCDM". 9th Transport Research Arena, Lisbon, Portugal, 2022.
- "Supporting the implementation of renewable energy technologies in the road infrastructure (ENROAD)". 9th Transport Research Arena, Lisbon, Portugal, 2022.
- "Application of ENROAD tool for pre-feasibility evaluation of renewable energy projects within the road environment". 10th Transport Research Arena, Dublin, Ireland, 2024.
- Paper based on D5.2 to be submitted to Energy (Elsevier) on the design and operation of the ENROAD tool.
- Other: Web site, local publications, etc.

^{*} Eligible for Publication by IEEE Industry Applications Society, so we are planning to submit an extended version of the paper to the IEEE Transactions on Industry Applications later this year or by beginning 2024.



Next Steps: looking for new opportunities

- More local approach for further development of the tool
- Looking for opportunities in congresses and companies: roads, energy, consultancy, software...
- Probably difficult at this point.
- Looking for funding in Regional, National and European research calls

Next Steps: technical approach

- Energy databases to web-based platform (template only for financial outcomes).
- RETs: small hydro and PVNBs estimates.
- LIDAR: more precise estimation of wake effect and shadow effect.
- Analysis of turbulence: more precise estimation of turbulence effect on turbine performance.



LIAISON: Lowering transport environmentAl Impact along the whole life cycle of the future tranSpOrt iNfrastructure





and resilient transport InfrasTructures and support the deployment of Green and Innovation Public Procurement and innovative engineering practices



THANK YOU!

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