Infrastructure Integrated PV in DYNAMic envirOnments (Dynamo)

Publieke samenvatting / Public summary

Aanleiding

Infrastructure integrated PV (I2PV) offers great potential as a major contributor to the Dutch energy landscape, especially in and along roads. However, these environments are not the standard static environments where conventional PV has been optimized. Instead it is a very dynamic environment with fast changing shadows.

Doelstelling

These dynamic environments offer a new challenge in PV to forecast, model, and optimize I2PV systems. There is no research in the literature to address these issues, so DYNAMO is an initial exploration of the impact and possible mitigation measures that will result in better I2PV components and systems.

Korte omschrijving

ECN will team up with Heliox, Heijmans, and Van Campen in order to evaluate the impact of dynamic environments with fast changing shade on solar noise barrier and solar in roadways. We will interface with prior and existing projects (SONOB, PVSiN, SolarHighways, and PV4Roads) in order to model and verify results from the laboratory. The DYNAMO consortium will also focus on dissemination of the new understanding to the Dutch community and stakeholders that are interested in addressing issues of PV in dynamic environments. This will result in a strong Dutch knowledge position with primary research and implementation for more optimized I2PV technology.

Projectinformatie / Project information

Projectnummer / Project number
TKITOE1621303
Subsidiebedrag / Grant amount
€ 145.434,00

Algemene informatie / General information

Penvoerder / Secretariat
ECN

Publicaties en materialen / Publications and attachments

- **14.04.2020**

  Eindrapport Dynamo 2020 (TKITOE1621303)

- **14.04.2020**

  Eindrapport Dynamo 2020 (TKITOE1621303) - bijlage A

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Resultaat

DYNAMO will deliver the first reporting of a laboratory study of dynamic shade specifically tailored to the road and traffic environment. This will be accompanied by expanding existing models for I2PV performance and yields to take into account specific dynamic environments in order to improve the business case and reduce technical and perceived risk for future I2PV projects.

De data in deze applicatie is afkomstig van de Rijksdienst voor Ondernemend Nederland (RVO) en wordt in samenwerking met de Topsector Energie ontsloten.
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