Mo-SaaS solution

Mo-SaaS-solution, aka. the moCore app, for simplified execution of the attachment of PV facades

Programm / Ausschreibung	IWI 24/26, IWI 24/26, Basisprogramm Ausschreibung 2024	**Status**	laufend
Projektstart	13.06.2024	**Projektende**	12.12.2025
Zeitraum	2024 - 2025	**Projektlaufzeit**	19 Monate
Keywords			

Projektbeschreibung

mo energy systems hat erkannt, dass seine Kunden und Partner effektiv davon profitieren würden, wenn sie ihre Gebäudewände, die sie mit vertikalen PV-Fassaden ausstatten wollen, mit wenigen Klicks analysieren könnten. Daher wird mo energy in der kommenden Entwicklungsphase ihr Pilotprojekt (die mo energy Plug & Play PV-System-Hardwarelösung) als Grundlage für die Entwicklung einer Software-as-a-Service (SaaS)-Lösung, der moCore App, mit einem integrierten KI-gestützten Autoplanner nutzen, der mittels Computer-Vision die vom Kunden aufgenommenen Bilder von Gebäudefassaden analysiert und die am besten geeignete PV-Lösung generiert.

mo energy möchte eine voll funktionsfähige SaaS-Lösung, auch bekannt als moCore App, für die vereinfachte Durchführung der Dimensionierung, Planung und Durchsetzung der Befestigung von PV-Fassaden schaffen.

Endberichtkurzfassung

Summary of Achieved Project Results

Software

A fully developed and comprehensively tested iOS mobile application has been completed and is ready for public release on the Apple App Store, where it will be available free of charge. The application underwent a structured beta testing programme involving 50 active users who engage with the app on a regular basis and contribute ongoing qualitative and functional feedback. A further 173 users have been successfully onboarded through a controlled rollout phase, enabling systematic observation of real-world usage patterns. To date, the application has processed and analysed over 500 real-world façade images , establishing a robust empirical basis for validating the accuracy, consistency, and reliability of the underlying AI analysis engine under authentic field conditions.
A fully operational ERP system has been successfully implemented and is live in production. The ERP has been architected for seamless integration into the B2B platform , such that when a façade project reaches the final stage of the moPlatform

workflow - the materials ordering step - the entire process will be fully connected and automated end-to-end , from project completion through to order fulfilment.
The foundational component of the moPlatform - the Admin Module has been fully developed, tested, and deployed to a production environment. The module is operational and ready for active use, enabling the centralised monitoring, configuration, and management of all projects generated through the mobile application.

Hardware

The developed PV facade solution for sandwich panel facades is technically mature and ready for further technical certification. The technical evaluation was carried out continuously and includes the results of assessments regarding structural stability, fire protection, and integration into external thermal insulation composite systems (ETICS). Based on these evaluations, the certification process was initiated. Documentation is being prepared as part of the ongoing certification process. Several prototypes of the PV facade modules were produced and tested under real conditions to validate performance, durability, and compliance with applicable standards. The results and test documentation form the basis for further product approval and certification.

The documentation of the certification requirements was compiled and evaluated accordingly. This resulted in a comprehensive analysis of the relevant international and national standards and norms for PV and BIPV systems, thereby creating an initial foundation for product development and certification. The technical evaluation reports regarding structural requirements, fire protection, and integration into external thermal insulation composite systems (ETICS) were prepared and incorporated into the product development process. Prototypes and test applications for the product groups pv-concrete, pv-wood, pv-pure, and pv-sheet were developed, implemented, and tested. The results of the fire protection, structural, and mechanical tests, as well as the necessary optimizations, were incorporated into the documentation. The required certification evidence and quality assurance documentation were compiled and submitted as part of the certification process. The development of the tests has been largely completed; remaining open points are still being clarified with the certification bodies.

Projektpartner

- mo energy systems GmbH