

Naslov projekta	
eng -	Performance and Reliability of Photovoltaic Systems: Evaluations of Large-Scale Monitoring Data
hrv -	Performanse i pouzdanost fotonaponskih sustava: procjena temeljem velike količine podataka dobivenih nadzorom sustava
Opis projekta	
eng -	<p>The aim of this COST Action is to improve the energy performance and reliability of photovoltaic (PV) solar energy systems in Europe leading to lower costs of electricity produced by PV systems by a higher energy yield, a longer life time eventually beyond the guaranteed 20 years as specified by manufacturers, and a reduction in the perceived risk in investments in PV projects. This objective will be achieved by analyzing data of the actual monitored long-term performance, defects and failures in PV systems installed all over Europe to quantitatively determine the absolute influences of components rated performance, key design of systems, installation, operation, maintenance practice, geographic location and weather factors on the performance, performance degradation over time and failure modes of these PV systems. Despite the rapidly growing market of PV systems, so far a COST Action on PV systems' performance and reliability has not been established. On the other hand it is very important to ensure the performance of PV systems to achieve long term goals for PV systems in the future single energy market such as: economic viability, securing investments, environmental sustainability and security and predictability of supply. Our aim is particularly suited to a COST Action as it entails the formation of an inclusive network of PV system researchers, data resources that will be analyzed by researchers, forming the largest-ever agglomeration of PV systems performance data in Europe, and experts that can include more-nuanced evidence-based reliability in PV system evaluation methods and simulation and design tools.</p>
hrv -	<p>Cilj ovog COST projekta je poboljšanje performansi i pouzdanosti fotonaponskih (FN) sunčanih energetske sustava u Europi s ciljem smanjenja proizvodne cijene električne energije iz FN sustava povećanjem proizvodnje energije, produljenjem trajnosti na više od 20 godina što navode proizvođači FN modula te smanjenje uočenih rizika u ulaganja u FN projekte. Cilj će se postići analizom izmjerenih podataka dobivenih dugoročnim nadzorom rada, defekata i kvarova u FN sustavima koji su instalirani diljem Europe kako bi se kvantitativno odredio utjecaj pojedinih komponenata sustava, ključnih načina dizajniranja, instaliranja, rada, uvriježenih praksi održavanja, geografskog položaja i meteoroloških parametara na performanse, vremensku degradaciju performansi i vrste kvarova koji su uočeni u tim FN sustavima. Unatoč naglom rastu tržišta FN sustava, do sada nije provedeno istraživanje unutar COST akcije na temu performansi i pouzdanosti FN sustava. S druge strane, vrlo je važno osigurati performanse FN sustava kako bi se postigli dugoročni ciljevi za FN sustave na budućem energetske tržištu poput ekonomske isplativosti, osiguranja investicija, ekološke održivosti te sigurnosti i predvidljivosti opskrbe.</p>

Ključne riječi/Akronim	
eng -	PV systems, Energy performance, Reliability, Monitoring, Evaluation
hrv -	FN sustavi, energetske performanse, pouzdanosti, nadzor, procjena
akronim -	
Informacije o financiranju:	
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Call:	COST Action
Financijer:	COST
Linija financiranja:	EU
Nadležnost:	Hrvatska
Ukupni trošak:	67.500 € (1st Grant Period, 1 November 2017 - 30 April 2018)
Trajanje projekta	
Navesti period:	2017-2021
Ustanova - uloga	
hrv -	Fakultet elektrotehnike, strojarstva i brodogradnje, Split
eng -	University of Split, Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture
Osoba - uloga	
Voditelj projekta:	Prof. Angele Reinders
	Tihomir Betti, MC member; Ivan Marasović, MC Substitute