

Future50

Climate Change Management
and Reporting (CCMR)

Climate Risk, Resilience
Management

FORTYGUARD

FortyGuard



<https://www.fortyguard.com>

#ClimateTech

Highlights

FortyGuard is part of **Masdar City's INNOVATE** platform²³⁴ and is an alumnus of **HUB71**,²³⁵ the **C3** accelerator²³⁶ and the **Mohammed Bin Rashid Innovation Fund**.²³⁷ It states that it has partnered with companies, such as **Honeywell** and **AlfaTech** in San Jose to provide joint temperature solutions to other clients. FortyGuard also won the 2023 Etisalat Hello Pitch Competition,²³⁸ the Best Pitch Award at the 2022 SHERAA Entrepreneurial Festival²³⁹ and was recognised with a Ma'an Certificate for Social Enterprises.²⁴⁰ FortyGuard counts the former CIO of City of Palo Alto, Dr. Jonathan Reichental, as one of its expert advisors, and indicates working with clients, such as **Aldar**, **Masdar City**, **Aldar Properties**, **NEOM**, **Emirates Global Aluminium** and **Emirates Nuclear**. It adds that it has partnered with universities, such as New York University in Abu Dhabi and The University of Wollongong in Dubai.²⁴¹ In September 2023, Forthgrid joined Techstars Miami's current cohort and secured US\$125k in funding as part of the program.²⁴²

Strategic alliances:

- Universities
- Business
- Government (Central Authorities)
- Municipalities
- Insurance Companies
- Event Building Companies

List impact technologies:

High-Efficiency Heating and Cooling, Smart Buildings,
Environmental Data

Headquarters and Middle East operational countries:

United Arab Emirates

Summary

FortyGuard has developed a **cloud-based AI tool** that it states provides enriched **dynamic temperature insights**. Initially a material science company specialised in cooling down asphalt in hot climates, FortyGuard has since evolved into a data provider to businesses and individuals, such as architects, real estate developers and engineering consultants, typically sharing insights on excessive heat identification, passive cooling and energy optimisation.

The company highlights that its platform is designed to be a comprehensive and scalable solution utilising **AI algorithms**, **data processing techniques**, **computer vision**, and **multimodality** to deliver accurate insights, analytics, and predictions.

Impacts

FortyGuard claims that its solution can provide near **surface temperature readings at up to 1m² resolution** as well as **refreshed data every few minutes at significantly lower cost** than satellite alone. It adds that its AI engine has mapped 170 cities globally to date by leveraging a variety of data sources and integrating the latest advanced technologies.

FortyGuard notes that it has created solutions around **hyperlocal mobile and static sensing** to provide detailed **heat simulations**, as well as passive cooling with heat protection, modulation and dissipation. It details that these are supported by customised **AI visuals**, **GIS data** and **net zero ESG reporting**. FortyGuard aims for its solutions to help finance energy savings calculations and monitoring, as well as material standardisation and specifications.

