

20<sup>th</sup> October, 2025

**The Executive Vice Chairman/Chief Executive**  
National Agency for Science and  
Engineering Infrastructure (NASENI)  
Idu Industrial Area, Abuja.

Sir,

**Letter of Intent to Apply for NASENI Research Commercialisation Grant Programme**

On behalf of the Solid Minerals Machinery and Equipment Development Institute (SOMMEDI), Nasarawa, Nasarawa State, I am pleased to express our intent to apply for funding under the NASENI Research Commercialisation Grant Programme.

We are proposing the development and deployment of a Thermoelectric Refrigerator Powered by Solar Photovoltaic Module and Incorporating IoT Technology, which seeks to address a critical gap in primary healthcare facilities, military forward operation base units, disaster relief agencies and humanitarian aid organizations located in remote areas where grid electricity is either unavailable or unreliable.

Our project aims to design and produce a cost-effective, energy-independent and portable thermoelectric refrigerator powered entirely by renewable solar energy. The system will integrate IoT-enabled sensors to monitor temperature, relative humidity and battery levels in real time, providing both on-site display through an embedded LCD screen and remote monitoring via a dedicated webpage and cloud database platform.

The requested grant will support the research, prototype development and field testing of this innovative solution. We strongly believe that our proposal aligns with NASENI's mission to promote indigenous, innovative and sustainable technological solutions that strengthen essential services particularly in underserved and off-grid communities.

Thank you for considering our intent to apply. We look forward to the opportunity to submit a full proposal for your kind review.

Sincerely,



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