UN SDGS

the Suitable Development Goals **+ their** *translation* **to** hardware design.

HTTPS://SDGS.UN.ORG/GOALS

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Direct Impacts from Hardware DESIGN

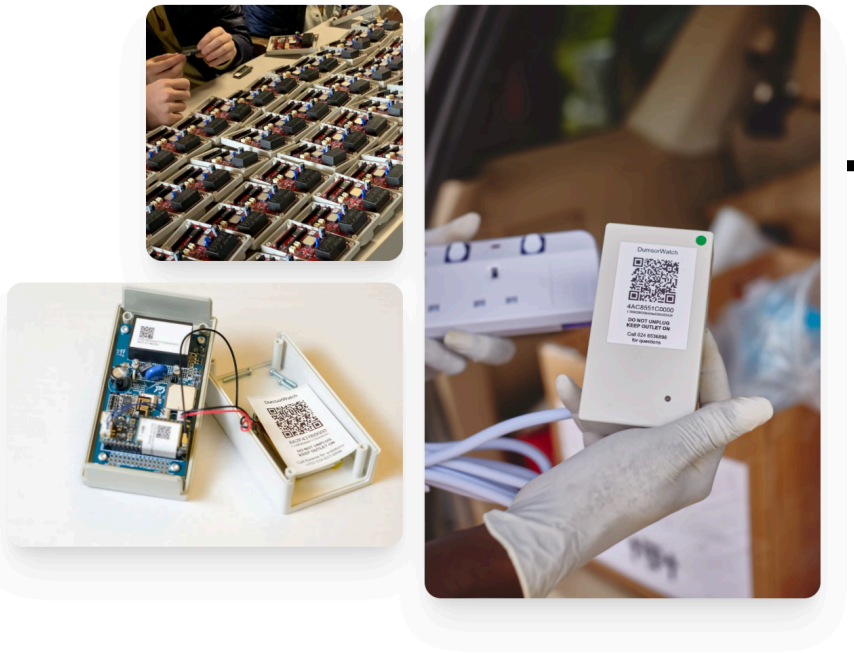
ZERO HUNGER

IronOx is using robots, controls, and electronics to make farming more sustainable. How do we deliver nutrients in precise quantities to plants without wasting energy? As in optimal plant production per unit energy, space, and water used!!!

—> this requires controls, instrumentation, robotics, sensing, etc. etc.

HTTPS://IRONOX.COM/SUSTAINABILITY/

AFFORDABLE, CLEAN ENERGY



nLine is a company that operates in Ghana, Kenya, and Uganda and uses sensors connected to the internet to measure, model, and predict grid reliability.

—> this data could be very useful for EV charging infrastructure, grid maintenance, predictions on power outages, and comparing renewable and nonrenewable power sources.

HTTPS://NLINE.IO/PLATFORM

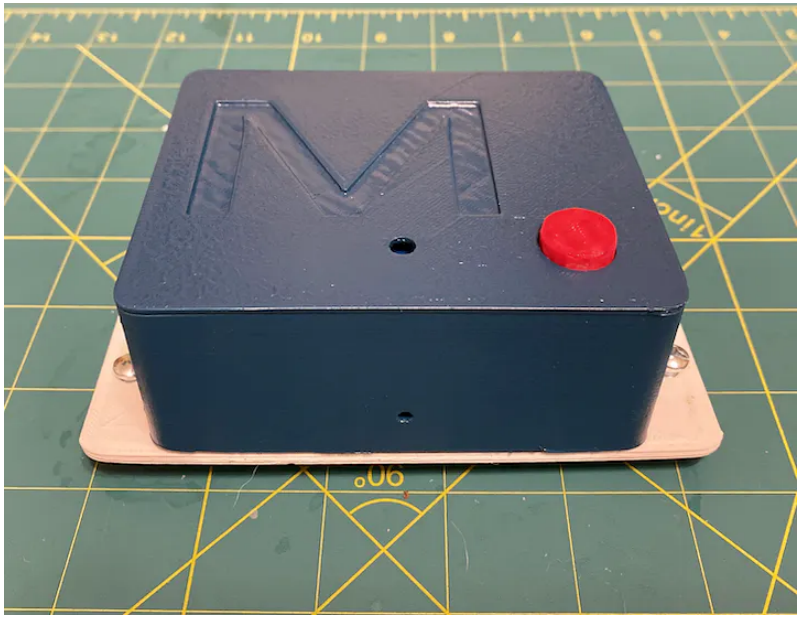
ACCESS TO HEALTHCARE

zipLine is a classic international development success story. They started with drone delivery of vaccines, medical supplies, even transplants in Rwanda. They reported a 21% increase in vaccinations in Northern Ghana, and a 67% decrease in wasted blood products in Rwanda.

—> The drone can even refrigerate the package so it doesn't go bad!

HTTPS://WWW.FLYZIPLINE.COM/SOLUTIONS/PUBLIC-HEALTH

SAVING THE ELEPHANTS



Mahouts is a conservation project based in the UK focused on the protection of Asian elephants. They use smart monitoring devices to track the elephants and learn their migration and behavioral patterns as well.

—> they work with mahouts in Thailand and southeast Asia to implement sustainable tourism to help their families while also conserving elephant populations.

HTTPS://WWW.MAHOUTS.ORG