

Open Source for Sustainability

WHY THE UN SDGs?

The United Nations Sustainable Development Goals (SDGs) target specific global crises so that multi-stakeholder networks can help to meet them through their collective ingenuity.

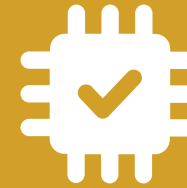


DIGITAL ASSETS & SDGs

Digital public goods, including open standards, open source software, open content, open AI models, open data, and open hardware, are vital to attaining the SDGs.



OPEN HARDWARE & SDGs



Open hardware specifications & designs such as RISC-V enable hardware reproducibility and efficiencies in energy & computing power.

OPEN STANDARDS & SDGs



The standards development process is a community's means of reaching an agreement, which is a step toward the global adoption of digital public goods.

OPEN CONTENT & SDGs

Open content developed by LF Training and Certification can help nurture the talent that is "structurally missing in a sustainability and developing economic context."



—CLYDE SEEPERSAD

AI, INNOVATION & SDGs

Developers could mitigate concerns, build trust, increase collaboration, and ultimately spur innovation by releasing their AI models under open source licenses.



GOAL 1: NO POVERTY

The Bakong project, sponsored by the National Bank of Cambodia and codeveloped by Hyperledger Foundation member Soramitsu, has made the country's mobile payment system accessible to its unbanked population.



GOAL 2: ZERO HUNGER

AgStack's field boundary dataset, AI modeling, and software applications help farmers use data to manage their water, fertilizer, and workers more effectively to improve yields.



GOAL 3: GOOD HEALTH & WELL-BEING

IBM's Call for Code initiative has supported projects that deploy alternative digital infrastructure during emergencies, such as the ClusterDuck Protocol's sensors and communication networks.



GOAL 4: QUALITY EDUCATION

With LF free courses and open content, learners can access practical training, pursue certifications, and use their new skills and knowledge in the open source ecosystem.



GOAL 5: GENDER EQUALITY

LF projects such as ASWF, CHAOSS, R Consortium, FINOS, OpenJS, and RISC-V host DEI working groups that combat bias and advance minority representation in their communities.



GOAL 6: CLEAN WATER & SANITATION




Botanical Water Technologies uses Fujitsu's Hyperledger Fabric service to mark the collection, filtering, refining, selling, delivery, and use of water otherwise wasted in agricultural production processes.

Open Source for Sustainability

GOAL 7: AFFORDABLE & CLEAN ENERGY

To reduce waste, LF Energy projects such as Operator Fabric, PowSyBI, SOGNO, and Grid eXchange Fabric coordinate energy sources, operators, grid data, and smart devices.




GOAL 8: DECENT WORK & ECONOMIC GROWTH

Internet Security Research (ISR) of the ISR Group reduces barriers to secure communication over the Internet so that people can learn, work, and contribute digitally to the economy without worrying about their privacy.



GOAL 9: INDUSTRY, INNOVATION & INFRASTRUCTURE

CNCF formed worldwide to shift to a cloud computing model in support of the development of the critical building blocks of this new digital economy.



GOAL 10: REDUCED INEQUALITIES

LACChain, run on Hyperledger Besu, gives Latin American businesses access to peer-to-peer transaction technologies, creating opportunities to level socioeconomic disparities while increasing personal protections.



GOAL 11: SUSTAINABLE CITIES & COMMUNITIES

The Civil Infrastructure Platform team creates OSS components for embedded systems to meet the requirements of modern municipal infrastructure such as energy distribution, wastewater management, healthcare provisioning, and communications.




GOAL 12: RESPONSIBLE PRODUCTION & CONSUMPTION

With 3MF Consortium's open specification for 3D print files, innovators can send their files to any system, supporting additive manufacturing's reduction of waste and fuel.



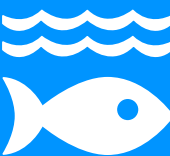
GOAL 13: CLIMATE ACTION

OS-Climate's data commons and analytical tools to measure risk and resilience allow investment managers to make investment decisions based on a company's alignment with net zero goals.




GOAL 14: LIFE BELOW WATER

OS-Climate wants to see their Data Mesh blueprint expanded into biodiversity data, making it a key enabler in the identification of risk & adaptation investment in marine ecosystems & other biodiversity hotspots.




GOAL 15: LIFE ON LAND

Smart Parks' OpenCollar uses Zephyr technology in its embedded trackers to catch poachers and collect evidence to take legal action against them.



GOAL 16: PEACE, JUSTICE & SECURITY

Open source projects such as Five-Fifths Voter, Open Sentencing, and Truth Loop are content platforms that address bias and discrimination in the judicial and regulatory systems.



GOAL 17: PARTNERSHIPS FOR THE GOALS

The LF hosts mission-critical pieces of technology in a neutral, collaborative way, made "uniquely possible because of the scale at which we can operate."
—SUMER JOHAL



LINUX FOUNDATION & THE SDGs

The LF manages a massive portfolio of digital public goods & provides the legal structures, funding sources, tools, growth mechanisms, & governance models for measuring community health that make sustainable development possible.

