# Everledger, US Department of Energy, Ford to trace battery life cycle using blockchain and IoT technologies

*Everledger fosters circular economy by promoting responsible re-use and recycling of electric vehicle and lithium-ion batteries*

**Davos, 23 January 2020 -** Everledger has been awarded Phase 1 funding by the United States Department of Energy for two pilot programmes to trace the life cycle of lithium-ion batteries using blockchain and Internet of Things (IoT) technologies. The first pilot sees the two organisations collaborate with Ford Motor Company, connecting stakeholders in its electric vehicle (EV) battery life cycle to ensure optimal management and responsible recovery at end-of-life. The second pilot focuses on a platform to inform and reward consumers for recycling portable lithium-ion batteries and the products they power.

Everledger is a committed proponent of circular economy, in which waste is eliminated and natural resources continually recycled and reused. By 2030, it is estimated there will be over 18 million electric vehicles. The societal impact of batteries can become a major driver to keep the transport and power sectors on track to meet Paris Agreement targets. According to the World Economic Forum, the battery value chain could enable 30% of the required emissions reductions in these two sectors, create 10 million jobs and $150 billion in economic value in 2030.

Everledger's two pilot programmes will work toward sustainable objectives, by ensuring EV and portable electronic batteries can be tracked for efficient life cycle management.

Both pilots will utilise the latest identification, data capture and blockchain technologies to give batteries a bespoke digital identity (or 'battery passport'). Through intelligent labelling solutions, physical objects will be seamlessly connected with the Everledger blockchain platform, enabling higher security, record immutability and privacy. This will afford stakeholders full visibility over a battery's location, condition, health score, and which metals could be recycled for use in new batteries.

The collaboration with Ford Motor Company – the automaker at the centre of the EV battery pilot – will see batteries traced from the moment of manufacture. This will allow critical life cycle data to be exchanged between stakeholders, creating a circular system whereby more elements are re-used, generate less waste, and increase protection from leakage of metals into the environment.

"This is the moment in which global leaders have to invest in a more sustainable future for our planet. The fact is adaptation is not only the right thing to do, it is the smart thing to do as it generates economic, social and environmental benefits. With every new initiative focused on the responsible recycling and re-use of natural resources, we stride closer to achieving a more thorough and permeating circular economy," said Leanne Kemp, CEO of Everledger. And she

complemented: “Electric batteries represent a measurable and demonstrable area of social, economic and environmental opportunity in this context, and we’re delighted to have received the support and endorsement of both the US Department of Energy and Ford.”

**Global Battery Alliance and beyond**

Everledger also contributes and endorses the principles of the Global Battery Alliance, an initiative dedicated to building an environmentally sustainable battery value chain. Lauren Roman, who leads the Metals & Minerals Ecosystem efforts of the company, says: “Blockchain is a powerful technology and performs as a key contributor to enabling and tracking battery life cycles for portable electronics and EVs. This will support establishing a low-carbon economy, in a manner consistent with the UN Sustainable Development Goals.” Lauren drives Everledger work streams also with the NAATBatt Recycling Committee and has been recently appointed New Technology Leader at FISITA, an organisation promoting ethics and excellence in mobility engineering.

In New Zealand, Everledger is an advisor to the New Zealand Battery Industry Group (B.I.G.) regarding traceability and supply chain transparency for lithium-ion batteries. The company has been working with B.I.G. to develop a circular product stewardship scheme for EV batteries, enabling the ability for them to be repurposed for energy storage. EV batteries may have around 70% to 80% of their capacity remaining when they reach the end of their useful life in a vehicle at about 10 years and can be repurposed for energy storage, extending life for another 10-15 years.

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**About Everledger**

Founded in 2015, Everledger is an independent technology company helping businesses surface and converge asset information, using a symphony of secure technologies, including blockchain, artificial intelligence, intelligent labelling and Internet of Things. Our purpose is to contribute greater clarity and confidence in marketplaces where transparency matters most.

We digitally streamline our clients’ compliance processes, to help them demonstrate the lifetime story of an asset with greater efficiency and accuracy. As technology partners, we also support in powering resilience and sustainability. With information out in the open, we believe the value of many industries – from diamonds, to fine wines, to e-recycling – will be shared by all stakeholders throughout the value chain.

Everledger is certified with the ISO 27001 standard by the British Assessment Bureau, a testament to our robust, ongoing and systematic approach to information security.

Everledger has been awarded a Technology Pioneer by the World Economic Forum in 2018.

For more information, visit: www.everledger.io

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Everledger spokesperson headshot and bio: www.everledger.io/press-room/media-assets

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