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# 2ReLogCarChain Using Blockchain Technology for Carbon Footprint Tracking and Monitoring

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# **Product Background**

- The company can monitor the carbon activities using 2**ReLogCarChain** app with integrated systems.
- The integration monitoring systems of carbon emission among supply chains networks is not available in the markets. This product can be an alternative solution.
- Blockchain technology has a high level of security and cannot be hacked.
- It can be used to support the integration of energy production, utilization, transmission, and storage so that every carbon footprint activity and carbon trading transaction can be tracked and no data can be manipulated.

# **Novelty/ Inventiveness**

- An early attempt to conceptualize the business model canvas to capture the low carbon activities.
- It is the only integrated systems app that can integrate business and sustainability outcomes using Blockchain technology.
- Measurement constructs of the mobile app to integrate and monitor the company and suppliers' carbon activities using Blockchain Technology.

# **Benefits/Usefulness**

- **2ReLogCarChain** is designed for environmentally responsible supply chain management and operations, which focus on carbon emission reductions and financial return.
- 2ReLogCarChain app uniquely assist the industry to fulfil the ISO5001 requirements – energy management practices.
- Transparency and Integrity compliance.

# **Status of Innovation**

• Prototype

# **Marketability & Commercialisation**



# **Product Image and Product Characteristics/Results**



# **Cost Analysis**

The product is ready and scale up cost depend on how many users (suppliers: >100 users – RM 50.000).



#### **Environmental Impact**

- Automotive companies must properly manage carbon emission, waste and disposal so that environmental penalty and fines can be avoided.
- Monitor and control carbon activities among supply chain networks including procurement, manufacturing, transportation, storage, and distribution.
- Sustainability is a long term profit strategy.

#### **Publication**

The blockchain-enabled technology and carbon performance: Insights from early adopters. *Technology in Society*, Elsevier, 64, 101507, 2021 (Scopus and WoS Impact Factor: 2.414).

# **Collaboration/Industrial Partner**



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