## Web for Environmental Sustainability: Identifying the Emerging Markets of the Cleanweb

Many companies now use the Web in ways that could benefit the environment. This could represent the emergence of a new sector, sometimes called *cleanweb* in analogy with the emergence of the cleantech sector in the 2000s. This research is investigating the structure of this new market. The following verticals and sub-verticals have been identified, and example companies are shown. These interim results are enabling a discussion within the international cleanweb community to better define the term cleanweb. A defined structure of the new sector can facilitate its development with a shared vocabulary between investors, entrepreneurs, customers, employees and public agencies.



Method: lists of search terms were found that identified companies with environmental, web or cleanweb characteristics. All 100k company profiles were downloaded from Crunchbase, the moderated, open database of technology companies. 6000 potentially relevant companies were identified with either environmental and web, or cleanweb terms in their descriptions. A crowdsourced list of Cleanweb companies from analyst Oriol Pascual, and companies in the Cleanweb UK community were also included. 400 companies were each categorised by their socio-technical approach and sustainability or resource outcome. These two dimensions allowed the companies to be plotted on a matrix, with popular combinations representing active markets. These combinations were then developed into the verticals below.

Live Resource Management







Resource monitoring, optimisation and control

- Buildings and homes
- Electricity grid and appliances
- · Renewable energy
- ICTs
- · Transport, logistics and industry
- Agricultural

Catalysing Resource Improvements







- Energy and carbon marketplaces and renewables financing
- Resource efficiency improvements analysis
- Renewables installations analysis
- Large scale energy planning

Collaborative Consumption

Side car





Peer-to-peer sharing and rental of

- Transport and deliveries
- Accommodation and storage
- Goods

Informed, Sustainable Marketplaces





- Transport routing, service info and ticketing
- Providing sustainability transparency in markets and supply chains
- Marketplaces for green or local products
- Services supporting cleanweb

Sustainability Knowledge, Behaviour and Community



- Disseminating sustainability knowledge and news
- Social networking for greens and peer-topeer knowledge
- Persuasive technology, nudging, gamification
- Collaborative innovation, sourcing ideas from a community

Managing the Environment



- · Environmental and collaborative sensing
- Environmental information management for science and regulation
- Corporate environmental incident management

Telepresence and Dematerialisation



- Telepresence, teleconferencing
- Dematerialisation, changing physical products for virtual ones e.g. iTunes
- Moving IT onto the virtualised clean cloud

Underlying Hardware



- Sensor and communication tech for cleanweb, e.g. sensing tech, internet of things, broadband-over-grid
- Efficient ICT hardware for green IT and data centres









