

# Empowering the digital energy economy

A year ago, May 2019, Empower IM Oy joined the ITEA Board, lending further weight to Finland's standing within the ITEA Community as the leading contributor in terms of effort. Empower is a multinational company realising a smarter society through digital innovation. It develops digital platforms for customer needs, utilising profound domain competencies of the service business ranging from enabling energy markets and smart energy information infrastructure to delivering information management systems and services to the energy sector.

## The concept of 'sharing'

Jan Segerstam is the Development Director at this energy sector service provider. He also chaired the Finnish national development programme FLEXe (Flexible Energy System), where he has recently been active in building the next steps for a new energy ecosystem in the European realm. Here he explains how Empower is at the heart of enabling the digital energy economy together with major stakeholders in the region. "Empower began in response to a need. A need for energy-related services to Finland's industrial sector. In effect, we grew the service infrastructure that was



needed for the liberalisation of the market – even before the liberalisation. Being ahead of the game, if you like. Finland did not have the large utilities that were common in Europe, so for us ‘sharing’ became key. We therefore helped develop the infrastructure of services that enabled this sharing or collaboration in networks. Something that is part of the Finnish culture and tradition, in society and in business.”

### Potted history

Following the establishment of Empower in 1999, a number of subsidiaries were established in various business areas. As the first step towards internationalisation, in 2000 the company acquired a majority holding in Eesti Elektrivõrkude Ehitus, an Estonian network construction company that in 2002 became Empower EEE AS with subsidiaries in Estonia, Latvia and Lithuania. Meanwhile, in 2001, Vattenfall Oy divested some of its operations to Empower and became a shareholder in the company. Under this contract Suomen Voimatekniikka Oy became a subsidiary of Empower. In 2008 Empower came under new ownership and now the organisation is in the hands of AAC Capital Partners and the corporate management.

### Mutually trusted organisation

“Our main focal area right now,” Jan continues, “is energy intelligence, and this is geared to finding services and solutions for the energy sector whereby the participants can outsource their functions to us while focusing on their core business strategy and strategic decision-making processes. This is quite unique because we are a mutually trusted organisation and so we facilitate these processes in which we have no vested interests. We have developed three major systems: customer information, energy data management and energy management. We are responsible for metering and billing for around half of the customers in Finland. In fact, Finland is the only country in Europe where smart metering and billing runs throughout the entire value chain. What Empower has done is to take the smart metering a step further and to digitalise the whole process. What’s more, because we use our own software, we can be much more pro-active in enabling service solutions for our customers, helping them in their strategic objectives. It is evident, then, that software innovation is an important topic for us.”

### All about software

The role that software plays in Empower is crucial. “Everything’s about software,” Jan emphasises. “Just take the commercial processes. They are all tied to real-time and time-dependent information, and it is the software innovation that enables the companies operating in the energy market to gain a strategic edge. Especially now in the era of an energy mix that involves not only renewables and more traditional sources but also sees a much broader palette of suppliers, from large utilities to private consumers. So, the need to get the mix and the supply-demand power-matching right is key to an efficient and fair energy market as well as onboarding renewables to help us lower the carbon footprint. At Empower we are working on innovative solutions for these challenges.”

### Where disciplines meet

Jan is clear about the added value of an interdisciplinary approach towards innovation. “In a Community like ITEA, one of the most inspiring aspects is the way that projects involve different disciplines, partners, cultures,

ideas and so on. And sharing it all. This gives us a much better chance of leveraging all the expertise that is available than if we were relegated to a kind of lower-league player confined to a single domain. ITEA has brought us new insight into the digital opportunities that come about when domain competencies meet. And being part of an industry-led collaborative effort provides very valuable input for us in trying to gain a better handle on the future for the good of society.”

### Leveraging results

Empower is involved in two ITEA 3 Call 5 projects and was previously involved in the M2MGrids and the SEAS project, the latter being the recipient of an ITEA Award of Excellence for Innovation and Business impact. In terms of leverage, from the SEAS project, Empower incorporated dynamic microgrid strategies into its future roadmap and enabled the interaction of flexible energy resources with its Enerim EMS solution that builds on SEAS knowledge in connectivity. “We are currently deploying this solution in upcoming datahub-enabled retail markets in Finland, and we expect to manage over 45% of the national distribution metering points in the coming years.”

### Taking ITEA to the next level

“For us ITEA is a unique Community that enables cross-domain and cross-national collaboration in open innovation with significant industry impact. To achieve global excellence, Europe needs the kind of collaboration fostered by ITEA and stemming from true industrial drive. And the very constructive feedback from industrial reviews sets ITEA apart from many of the other Communities and Clusters. We really get value from that process. Having joined the ITEA Board a year ago is a statement of our commitment to contributing our long-standing expertise in digitally driven services and digital knowledge in enabling energy market processes and platforms. We are thrilled to be ‘on board’ and to be going forward into an exciting future with ITEA, helping take ITEA to the next level in ITEA 4.”

### More information

[www.empower.eu](http://www.empower.eu)

