

- PRESS RELEASE -

## **Drayson Technologies works with CST on the development of its Freevolt™ technology**

**London, UK, 7 March 2016 – Drayson Technologies has used CST® electromagnetic simulation software to help develop Freevolt, a revolutionary energy harvesting technology that turns unused RF signals into electricity. Freevolt, which was launched by Drayson Technologies in September 2015, is the first viable power source of its kind.**

Harnessing these unused fields requires very efficient devices that can operate in a range of conditions. Drayson Technologies used CST STUDIO SUITE® to simulate and develop the antenna designs and wireless power transfer technology used in Freevolt and to develop coil designs for induction-power transfer (IPT). The wide selection of solvers in CST STUDIO SUITE made it possible to model these different components within a single interface.

The compact and lightweight Freevolt harvester absorbs energy from multiple RF signals, including Wi-Fi, 2G, 3G, 4G and digital broadcasts, to power low energy devices such as sensors, beacons, security tags or wearables. The first commercial application of Freevolt is the CleanSpace™ Tag, a personal air quality sensor created by Drayson Technologies.

Manuel Pinuela, CTO, Drayson Technologies, said: *“We first started working with CST as part of Drayson Racing Technologies involvement with Formula E. We have since built up a close partnership and made the decision to continue using CST’s applications in the development of Freevolt. The extensive portfolio of electromagnetic simulation technology that CST has available have been instrumental to our work.”*

Dr. Martin Timm, Director Global Marketing, Computer Simulation Technology (CST) said: *“CST prides itself on partnering with companies at the forefront of technology innovation. Drayson Technologies, with its revolutionary Freevolt technology, is a perfect example of this and we are extremely proud to have been a part of its development.”*

### **About Drayson Technologies**

Drayson Technologies Ltd is a development stage electronics and software company headquartered in London with offices in Silicon Valley focused on the field of wireless energy transfer. Drayson Technologies is exploiting a new proprietary technology, called Freevolt, that “harvests” energy from ambient wireless radio frequency networks (Wi-Fi, Cellular, Broadcast TV), to power low-energy electrical devices and eliminate the need for cable charging or changing batteries. The initial implementation of Freevolt RF energy harvesting is in the CleanSpace™ Tag, a personal air pollution sensor that is totally portable.

For more information on Drayson Technologies please visit:

[www.draysontechnologies.com](http://www.draysontechnologies.com)

### **About Freevolt™**

Freevolt™ is a new technology set to revolutionise the way the future is powered. It harvests ambient radio frequency (RF) energy from broadcast, mobile and WiFi networks – energy that is currently unused – to produce small amounts of electricity. Freevolt™ enables a range of Low Energy Internet of Things (LE-IoT) devices to be Perpetually Powered™ negating the need to change batteries or to plug-in to charge. The Drayson Technologies CleanSpace Tag™ is the first commercial application of this technology. Freevolt™ is available through license to the international developer community.

For more information on Freevolt please visit:

[www.getfreevolt.com](http://www.getfreevolt.com)

Enquiries: [info@getfreevolt.com](mailto:info@getfreevolt.com)

### **About CleanSpace™**

CleanSpace™ is a technology-enabled social movement to improve the air we breathe, designed and built by Drayson Technologies and launched to the public in 2015.

The CleanSpace™ app and Tag aim to inform, connect and motivate people to work together to reduce air pollution. Through CleanSpace™, Drayson Technologies want to prove that technology can empower people to take individual actions that collectively change the world.

For more information on CleanSpace™ please visit:

[www.ourcleanspace.com](http://www.ourcleanspace.com)

**About CST**

Founded in 1992, CST offers the market's widest range of 3D electromagnetic field simulation tools through a global network of sales and support staff and representatives. CST develops CST STUDIO SUITE, a package of high-performance software for the simulation of electromagnetic fields in all frequency bands, and also sells and supports complementary third-party products. Its success is based on a combination of leading edge technology, a user-friendly interface and knowledgeable support staff. CST's customers are market leaders in industries as diverse as telecommunications, defense, automotive, electronics and healthcare. Today, the company enjoys a leading position in the high-frequency 3D EM simulation market and employs 300 sales, development, and support personnel around the world.

CST STUDIO SUITE is the culmination of many years of research and development into the most accurate and efficient computational solutions for electromagnetic designs. From static to optical, and from the nanoscale to the electrically large, CST STUDIO SUITE includes tools for the design, simulation and optimization of a wide range of devices. Analysis is not limited to pure EM, but can also include thermal and mechanical effects and circuit simulation. CST STUDIO SUITE can offer considerable product to market advantages such as shorter development cycles, virtual prototyping before physical trials, and optimization instead of experimentation.

Further information about CST is available on the web at <https://www.cst.com>.

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