

# Simon Redford

Simon Redford is an Engineer with more than thirty-five years' experience. He holds a first class honours degree in Electro-Mechanical Engineering and a Master's degree in Systems and Control. He is currently focused on development of heating systems including Micro Cogeneration, Industrial CHP and Biomass technologies via his business Redford-Tech Limited.

In previous roles Simon has developed energy efficiency and renewable energy projects and products for the Electricity Industry, major energy users and product manufacturers. He has also been involved in specialist software development for Engineering applications and still develops real-time software for control and visualisation of thermodynamic products.

Simon is the principal inventor or co-inventor of a range of patented technologies including innovations in solid fuel stoves, various aspects of thermodynamic machines and voltage control. In addition to commercialising the FHT Stove technology, he is currently developing Organic Rankine Cycle (ORC) products and is assisting other developers with practical implementation and IP development for heating and cooling technologies.

Past posts include Managing Director of Energetix MicroPower, Group Manager at EA Technology, and various Engineering R&D roles at BBN Systems and Technologies, Intelligent Applications Ltd, Heriot Watt University (staff) and the Royal Aircraft Establishment.

## Skills & Expertise

- Heating and Cooling technologies, including Wood Burning Stoves, MicroCHP and Heat Pumps
- Energy Efficiency and Renewable Energy Product Developments
- Due Diligence Studies
- Control Systems
- Data Analysis
- Systems Modelling

## Experience

### Director and Innovator at FHT Stoves

*February 2016 - Present*

Commercialisation of the FHT Stove product. FHT Stoves is a trading name of Redford-Tech Limited and covers all product development related to wood burning and multi-fuel stoves. See [www.FHTStoves.com](http://www.FHTStoves.com)

### Director at Redford-Tech Limited

*January 2007 - Present*

Simon's company provides consultancy services to help developers, specifiers and users of energy efficiency and renewable technologies. These include 'turnkey' services to help transition concepts from the 'back of the envelope' to 'proof of concept' and analysis services to identify the true value of new technologies and to protect intellectual property.

Consultancy roles have included investigation of innovative absorption and adsorption heat-pump technologies, commercialisation studies for Voltage Control, production 'snagging' for an Organic Rankine Cycle product, analysis of industrial CHP opportunities and assisting other developers of innovative heating and cooling technologies. The company also develops energy efficiency and

renewable energy technologies, particularly related to heating and cooling systems. See FHT Stoves above.

### **Director, Energetix MicroPower at Energetix Group**

*2002 – 2006*

Energetix Group was formed to develop new and sustainable energy products. Energetix MicroPower was the first stage of development of an Organic Rankine Cycle wall-hung, domestic micro-cogeneration product. During some of this period Simon was seconded to Baxi Boilers.

At Energetix Group Simon was also involved in development and patenting of a domestic voltage control product based on work from his previous role at EA Technology, and other thermodynamic products for ice storage and compressed air energy storage for standby power applications.

### **Group Manager at EA Technology**

*1990 – 2002*

EA Technology transitioned from being a laboratory of the nationalised Electricity Industry to a provider of services and products for electricity suppliers, distributors and their customers over this period. Simon's group pioneered Energy Efficiency, Demand-Side Management, Micro CHP and Energy Services, and successfully diversified the customer base to include many major energy users including the retail sector.

See LinkedIn for other, previous roles.

## **Education**

### **University of Manchester Institute of Science and Technology (UMIST)**

MSc, Systems & Control, *1983 – 1984*, Howard Rosenbrock Medal

### **University of Wales, Swansea**

BSc, Electro-Mechanical Engineering, *1979 – 1983*, First Class Honours

18 month period spent at the Royal Aircraft Farnborough during degree

## **Patents**

FHT Stove patent granted and in force in multiple countries. Follow Espacenet search of EP2382422 for links to all European, New Zealand, and Canadian patents. See also additional UK patent grant GB2497029. All rights assigned to KinXerG Limited (former name of Redford-Tech Limited).

Joint inventor named on five patents for thermodynamic processes and voltage control. Several in force in multiple territories worldwide.

## **Contact & Company**

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