

### **Making Silverstone a Low Carbon Motorsport Circuit**

This is an exciting research opportunity to address the challenges of energy and sustainability associated with the planned expansion of Silverstone circuit and infrastructure through new build and retro-fit.

It is divided into two separate Engineering Doctorate (EngD) research projects, named the *Becketts Project* and the *Stowe Project*. The two projects focus on different yet complimentary elements associated with achieving a low carbon motorsport facility as part of Silverstone's sustainability planning. The research is led by Dr Graeme Larsen from the University of Reading's School of Construction Management and Engineering. Silverstone is aiming for a low zero carbon facility, thus raising the benchmark within motorsport infrastructure globally. Understanding how this can be achieved both organizationally and technologically is essential yet challenging, as off the self solutions are unsuitable and means we are able to offer two positions:

**Becketts Project: "Developing a strategic roadmap for achieving a low carbon motorsport circuit"**

**Stowe Project: "Low carbon buildings and smart energy management for a low carbon motorsport circuit"**

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**Becketts Project: "Developing a strategic roadmap for achieving a low carbon motorsport circuit"**

#### **Engineering Doctorate (EngD) Research Engineer - Vacancy Reference No: P30-2013**

Silverstone has a long term deal in place to hold the British F1 Grand Prix, together with many other blue ribbon motorsport events. This has enabled Silverstone to develop sustainable expansion plans for the whole site; re-inventing "Silverstone Valley" to rival the purpose built venues around the world. Planning approval has been granted and Silverstone is determined to ensure its future as a low carbon venue.

Knowing how to approach this complex problem is challenging, with competing agenda's associated with materials, site, stakeholders and technologies together with the new organizational processes required. As such, the proposed research will develop a problem structuring methodology bespoke to "Silverstone Valley" that can be used as a roadmap to become low carbon. The objectives in order to meet that aim are:

- Establish a baseline of current practices
- Understand what other International circuits are achieving
- Ascertain the true cost/value of carbon reduction
- Analyse the supply network to drive change in behaviours, products, procurement processes and people
- Facilitate appropriate engineering/modelling to support business actions

This will address the organizational processes required through the supply network, thus offering a strong connection with the other, complimentary EngD, "Low carbon buildings and smart energy management for a low carbon motorsport circuit". The Research Engineer (RE) will be based at Silverstone Circuits in Northants, with expensed travel to the University of Reading for attendance at taught courses and supervisory meetings.

We are seeking self-motivated, ambitious applicants with an interest in problem structuring methodologies for sustainability, applied to large yet niche markets. Applicants should have a background in organisational behaviour; project or business management; management in the built environment; or process management. An interest and understanding of motorsport is desirable although not essential. Applicants must have a good degree (minimum 2:1 or higher) or MSc in a related field. You will need to be an excellent communicator with a drive to deliver quality doctoral level research for an organisation with global a reputation.

#### **4 year Package**

- Minimum stipend of £17,800 (£15,090 tax-free, funded by EPSRC)
- All tuition fees are included
- Expenses package included
- EngD awarded by the University of Reading (subject to examination)

#### **Applications**

Apply online at: <http://www.reading.ac.uk/pgapply>

You also need to submit a full CV and Personal Statement to [e.e.hawkins@reading.ac.uk](mailto:e.e.hawkins@reading.ac.uk)

Proposed start: tbc

Please note the EPSRC has eligibility requirements refer to:

<http://www.epsrc.ac.uk/PostgraduateTraining/StudentEligibility.htm>

#### **Further details**

For an informal discussion regarding the project please contact Dr Graeme Larsen FCI0B on 0118 378 7185 or [g.d.larsen@reading.ac.uk](mailto:g.d.larsen@reading.ac.uk)

Further information on the TSBE Centre can be found at: <http://www.reading.ac.uk/tsbe> and at the EPSRC website <http://www.epsrc.ac.uk/postgraduatetraining/centres/idcs.htm>