Project Brief:

The existing CHP engines have become economically unviable to run and replacement with similar sized units was determined to be the best value solution to the College. The project also includes various associated works around the district heat networks and connected plantrooms.

The South Kensington campus power and heat networks connect 66% of the buildings. This project will deliver operational cost savings of £1.4m per annum compared to importing power from the National Grid and using conventional boilers to provide heat (provided as the base case). CHP is a low Carbon Dioxide emission technology and the technology proposed will reduce CO$_2$ emissions by 4,000 tonnes compared to the base case.

These works represent the prerequisite activities that will take place prior to the College entering into a 10-year Contract Energy Management (CEM) agreement with Vital Energy, who will operate the plant on the College's behalf in an efficient and cost effective manner.

The project will deliver:

- Replacement CHP engines, retaining existing boiler plant
- Upgraded / new plate heat exchangers to enable recovery of low grade engine heat
- New steam supply to SAF building (increase district heat load)
- New dry air coolers and various repairs to the existing heat network infrastructure
- Take over maintenance of the district heat network from Imperial College.
- 10-year Energy Centre operating contract (option for 15 years)
- No additional space will be created or utilised as a result of this project.

Key construction dates:

- Start on site: Summer 2015
- CHP Engine removal: November 2015
- CHP Engine install: Easter 2016
  (partial closure of Ayrton Road and Unwin Road from 4pm, Wednesday 23rd to 6am, Thursday 31st March)
- Anticipated completion: August 2016

To learn more about Estates Facilities refer to their website: http://www.imperial.ac.uk/estates-facilities/

Construction Project Team:

- **Project Manager:** Arup
- **Contractor:** Vital Energi
- **Architect:** n/a
- **Mechanical Contractor:** n/a
- **M & E Engineer:** Arup
- **Electrical Contractor:** n/a
- **Structural Engineer:** n/a
- **Cost Manager:** Imperial College

Project Facts & Figures:

- **Construction Value:** £11.2M
- **Funding Source:** College

Construction Project Programme:

- **Start on Site:** August 2015
- **End Date:** August 2016
- **Occupation Date:** n/a

For more information on this project please contact the project manager Stephanie Black
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