

Flogas and CHP - Combined Heat and Power in Tralee



**Tralee Regional Sports and
Leisure Centre Case Study**

To see what the Flogas Energy Solutions Team can do for you, contact:

Drogheda

041 983 1041
www.flogas.ie

Cork

021 450 6688
www.flogas.ie

Belfast

028 9073 2611
www.flogasni.com



Flogas and CHP - A Winning Combination in Tralee

The Leisure Centre Challenge

The Tralee Regional Sports and Leisure Centre is the largest sports complex in Kerry with almost 400,000 visitors annually. Facilities include a 25m pool, 12.5m teaching pool, steam room and sauna; a large sports hall with seating capacity for over 1,000 as well as squash, racquetball and handball courts, a state of the art gym, outdoor playing pitches and floodlit astroturf pitches.

Energy bills account for much of its overall running costs so any improvements in energy efficiency was likely to yield substantial savings. Tim McSwiney, Senior Executive Engineer with Tralee Town Council and Willie Moynihan, Chief Energy Officer with Kerry County Council, whose backgrounds in energy efficiency are well known in local authority circles, were interested in the possibility of installing a combined heat and power (CHP) unit at the Centre. CHP technology allows for the simultaneous generation of heat, hot water and electricity in a single process.

Due to the company's long standing relationship with the local authorities in Kerry and experience with CHP technology, Flogas was asked to recommend a system that best suited the Centre's requirements.

Brian Murphy, Technical Services Engineer with Flogas, visited the site and concluded that in addition to the savings achievable by using CHP, further significant savings could be made by replacing older, inefficient heating equipment with modern alternatives.



The Flogas Solution

Flogas enlisted the expertise of CHP specialist Tony Lyons who duly supplied an ENER-G 75P unit based around a Mercedes LP Gas-fired engine and which simultaneously generates 75kW of electricity and 140kW of heat.

"The main advantage of this type of unit is that, during the day, the vast majority of electricity used in the complex is generated on-site instead of being imported from the grid. This fact, along with the very competitive LP Gas tariff from Flogas, will lead to massive reductions in electricity bills," commented Tony.

The Flogas solution also saw the installation of two 115 kW, LP Gas fired condensing boilers to replace the Centre's outdated main oil boiler. The remaining boiler had its oil burner replaced with an LP Gas burner and now serves as a backup to the main system during maintenance.

The hot water system for the showers and sinks had its existing calorifier replaced with a highly efficient rapid recovery model from ACV. The tank-in-tank design of this unit offers far more surface area for heat exchange, enabling large volumes of hot water supply from a small volume of storage. This minimises the heat losses associated with hot water storage and increases savings further.

Liam Bohan, Centre Manager, said, *"Since the CHP unit was installed, which is powered by LP Gas, our electricity bills have been reduced by a massive 60% per month. I would estimate that, by the end of a full year in operation, the Centre will have made a savings equivalent to two additional jobs which is good news in this economic climate. Another very significant change is that we now have much more control over our energy usage because we are able to monitor it constantly."*

Brian Murphy of Flogas said: *"As one of the leading energy suppliers in the country, Flogas strives to offer our customers the very best in terms of sound technical advice and competitive pricing. The installation at Tralee Sports and Leisure is one of the finest examples of the implementation of energy efficient technology in the area and we're proud to have been a part of it."*

As an energy solutions specialist, Flogas can design and implement a complete turnkey solution for your business, whatever its size so why not avail of our no-obligation free survey? We'll analyse your existing energy costs and outline the benefits and savings you'll enjoy by converting to Flogas LP Gas.

