

## Project Information

### Installation of a Biomass heating & hot water system at a specialist college for young people with severe and complex disabilities

#### Background

The National Star College, based in Gloucestershire, is a leading charitable provider of further education, training and personal development for young people and adults with complex physical disabilities, acquired brain injuries, and associated learning, sensory, medical, emotional and behavioural difficulties. The College offers 143 full-time residential places for disabled young people aged between 16-25 from all over the UK, along with day student programmes for local students, and part-time adult education programmes for over 230 local disabled adults. Young people attend the College with many different conditions including cerebral palsy, spina bifida, hydrocephalus, muscular dystrophy, chronic arthritis, brain injuries, learning and communication difficulties, emotional and behavioural challenges and sensory impairments. The disabilities of our students have become increasingly complex and severe, due to advances in medical care which mean that babies can survive very premature births and children survive major illness and accidents, but often with lifelong profound disabilities. Additionally, advances in technology and IT enable severely disabled young people to communicate and access education.

#### The Challenges facing the College

The resulting pressure on physical resources and increase in staff numbers required to support our students means that our existing facilities are overstretched and unable to adequately meet students' needs. To address this, the College is undertaking a long-term strategic redevelopment of its existing site, through a combination of new buildings, conversion and refurbishment. Work commenced in 2006 and is due for completion in 2010, subject to funding.

#### The Biomass Installation

With the help of a Naturesave Trust grant of £2,500, the College is installing a Biomass heating and hot water system within a new Energy Centre to serve existing and future buildings as part of its redevelopment plans. The College's existing oil fired heating and hot water system is costly, inefficient, environmentally unfriendly and no longer able to meet the demands put upon it by the needs of the College's severely disabled students. There is a high demand for efficient heating and hot water due to the very high levels of personal care needs of our severely disabled students, and the residential nature of our service provision. The change to Biomass heating and hot water will provide the College with a more environmentally friendly, cost efficient and reliable heating and hot water system. The Biomass boilers will use wood chipping fuel from a sustainable resource.

The College is situated within the Cotswolds AONB and care has been taken to ensure that the new Energy Centre is sympathetic within its setting, the design is low lying and discreet, will have no detrimental effect on the character or appearance of the area, and will mature harmlessly and harmoniously into the landscape.

The work on the Biomass installation and associated work is due to commence in Spring 2008 onwards, and is due for completion September 2008. It is anticipated that the system will be fully commissioned and operational by late October 2008.