YOUR COUNTRY YOUR CALL

GreenGold is the name given to a "Your Country Your Call" project aimed at powering Irish long distance haulage trucks with a 100% renewable indigenous Irish Fuel, a fuel that has been in use in Ireland since at least the early nineteenth century.

Who is behind it?

This project is presented by 4 people who; between them have succeeded in growing and producing, this 100% renewable Irish fuel and converting trucks to allow its use as a fuel. Between them they have years of experience together with a 250 hectare arable farming business, a 3,000 tonne/annum oil seed crushing and filtration plant. They also have 20 heavy goods vehicles, 2 light commercial vehicles and 2 cars converted to run on Irish Rape Seed Oil (IRSO), as well as a facility for servicing and maintaining HGVs and cars.

Introduction

Using this experience in the growing, processing and use of IRSO as a fuel they seek to emulate the German success particularly in Bavaria where they have 600 producers with an annual output of 300 million litres. This is enough fuel to power 60,000 trucks for one year.

The group of 4 believe that Ireland can support 100 or more rural based small businesses each producing 1,000,000 litres of rapeseed oil per annum, enough oil per business to fuel 20 long distance trucks for one year - in total 2,000 trucks. As in Bavaria, the Irish road haulage industry is very much rurally based, and is therefore ideally placed to use this locally produced fuel in their trucks. With large fuel capacities, the trucks can refuel at their depots, which will reduce the need for expensive national distribution systems. The biofuels currently available at fuel stations use a mixture of non-renewable fossil fuels and are not biodegradable thus requiring the containment systems of conventional fuels. IRSO is biodegradable and without major containment / polluting issues.

There are several reasons to target the use of IRSO in HGVs instead of light commercial vehicles and private cars.

The lighter vehicles are much more suited to plug-in electricity.

100m litres of IRSO would fuel 2000 HGVs at a total cost of fitting conversion kits of €8m (at €4,000 each), 100m litres IRSO would fuel 100,000 cars at a total cost of €200m (at €2,000 each). 100,000 cars would also require a national distribution network. (The conversion of existing trucks to operate with a neutral carbon footprint is considerably more environmentally friendly than waiting until such time as "electric" trucks finally appear and the neutralizing of existing resources is far more financially sound than replacement with more expensive equipment).

Rape Seed is grown only as a break crop in a mainly cereal rotation, much like sugar beet and potatoes. If the land previously used for sugar beet alone was used this would supply enough oil for twelve hundred trucks **(source Hippo Project).** Growing rape enhances food production, as subsequent cereal crop yields increase by 10%+. A reduced amount of fertilizer is required for these crops as the deep rooting structure of Oilseed Rape benefits the soil. Minimum cultivation techniques can be used to establish Oilseed Rape crops and the following cereal crop, thus dramatically reducing fuel usage. The straw residue is commonly used as a fuel and as raw material for solid fuel such as straw logs and pellets.

The residue from the crushed seed is usually pelleted and is an excellent animal feed replacing imported soya and benefits the animal by reducing the cholesterol properties of its meat, eggs and milk. It can also be used as a fuel to replace wood pellets. In excess of 5 tonnes of seed can be harvested from one hectare, this in turn produces 1666 litres of rape oil and 3.33 tonnes of high quality animal feed pellets or fuel.

The expertise this group has and the structure they can develop, if capitalized on, can also be used in the Third World with crops such as Castor and Jatropha. They are prepared to partner with people and aid organisations they already know in developing countries and help them develop this model.

What is needed to make it happen?

Realizing the Vision: In order to turn this vision into a reality they will establish a structure that would organize the design and construction of containerized processing plants and truck conversion kits. They will also strive to source as many of the components, both hardware and software in Ireland. This organization will operate as GreenGold.

GreenGold will, in co-operation with financial institutions, create funding schemes that would assist processors and end users of IRSO to finance plant and conversion kits.

GreenGold will work with Teagasc and the farm organizations to encourage, promote and improve the growing of Oilseed Rape.

GreenGold will organize contacts and/or contracts between growers, processors and end users.

GreenGold will work with various organizations, both at national and European level, to establish and promote quality standards and agronomic/agricultural standards for the sustainable growing of Rapeseed and production of IRSO.

GreenGold will develop a structure that will provide testing facilities for testing rapeseed, rapeseed residue and IRSO.

GreenGold will develop its brand/logo to promote Irish Rapeseed derived liquid and solid biofuels.

GreenGold will develop its brand/logo for haulage companies who use our branded biofuel. In effect GreenGold will become the Kerrygold/McDonalds of IRSO biofuel.

The Government's Role: The EU imports 48% of its energy while Ireland imports 87% and is one of the most dependent on imported energy in the EU after Cyprus, Malta, and Luxembourg. The Government has invested vast amounts of public resources over the last number of years to encourage the production and use of renewable replacements for imported fossil fuels with very limited success, particularly in the transport fuel sector.

Both the Mineral Oil Tax Relief Schemes (MOTR I & II) have failed to reach their target and are based mainly on imported biofuel with little or no additional fuel security and no verification of environmental sustainability. The government is currently enacting legislation to oblige the big oil companies to include 4.75% of biofuel in their annual sales of some, but not all transport fuel. This scheme will be referred to as the Biofuel Obligation Scheme (BOS). While BOS, unlike MOTR I & II, may well achieve its objective in increasing the use of biofuels it will be based almost totally on imports and therefore will do little or nothing for Irish biofuel production or fuel security. Imported biofuels are a source of concern to Rain Forests and incur a large carbon footprint when compared with Irish Rape Seed Oil. Irish

Oilseed Rape has immediately verifiable environmental sustainability and a carbon footprint that compares very positively with that of any imported biofuel.

Fuel security has been deemed so important in the past that the National Oil Reserve Agency (NORA) was established to maintain reserves of oil, some of which are held outside the state. A 100% Irish fuel supply for trucks would enhance our national fuel security by the sum of its production.

Government supports the production and use of solid biofuels such as timber and other biomass products with grant aids for the growing of biomass crops and by grant aiding the installation of biomass burning boilers at both domestic and institutional/industrial level. Timber and biomass fuel is also exempt from excise duty unlike solid fossil fuel such as coal. Government also supports renewable electricity generation, such as wind, wave, tidal and biomass by setting a minimum price that will be paid per Megawatt Hour, referred to as the Renewable Energy Feed In Tariff (REFIT) by the electricity distribution companies. The government has also introduced a carbon tax on some fossil fuels to further encourage the use of renewable biofuels and has greatly reduced both the Vehicle Registration Tax (VRT) and annual road tax on low emission cars. Recently, Minister Eamon Ryan announced the introduction of a grant scheme of €5000 per vehicle for the purchase of electric cars and a reduction of the VRT by €4500. This will apply to 2000 cars and will cost the exchequer €37m. The electricity used to power electricity cars will be free of excise even though, while the cars may be emission free, 87% of our electricity is produced from fossil fuel and will continue to produce large amounts of Green House Gases until such time as our electricity production goes over totally to renewables such as wind.

With the help of "Your Country, Your Call" we hope to gain Government support for the production and use in trucks of the only biofuel that is both 100% Irish and 100% environmentally sustainable, a renewable replacement for imported liquid fossil fuel by exempting Irish PRSO from excise duty. The excise foregone (about €40m per annum based on our target of 100M litres) by the Government of doing this would be more than offset by securing long term employment, the cost of carbon credits, fuel security and the National Oil Reserve Agency (NORA) gains in strategic capacity and the reduction in imports and improved balance of payments (€60M oil and €30M animal feed per annum). It will also reduce the potential for penalties that will arise if we do not reach our EU and other International obligations.

To incentivise truck conversions government will offer a reduction of, say, €1,000 per annum on the annual road tax on HGVs that have been fitted with conversion kits to use PRSO by submitting proof of using a minimum amount of PRSO in the previous year at a cost. It is extremely important that such conversions are only from approved sources as the ad-lib use of unconverted or improperly converted vehicles is very undesirable. €2,000,000 per annum would be the sum forgone in annual road tax based on 2000 HGVs. This principle is already well established in low emissions cars paying less road tax.

It is our belief that our proposal if fully supported by the government would, in fact, be truly self-financing.