

The power of waste

- **Elaine Green**

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WHILE the government is pinning many of its hopes of reviving the country's ailing economy on the setting up of green-energy projects, some experts maintain that an energy bill tabled in parliament last month fails to encourage the burning of biomass - a power-production method used in many "green capitals" of Europe.

Efstratios Kalogirou, president of the Waste-to-Energy Research & Technology Council, a non-governmental organisation, tells the Athens News that he is lobbying Environment Minister Tina Birbili to include a minimum tariff for the purchase of power derived from the burning of solid waste before the bill is debated in parliament.

Kalogirou also stresses that Greece's hitherto monopolistic energy sector is poised for a substantial shakeup that will open it to outside competition that should present opportunities for outside investors.

Athens News: Do you really think the government's austerity measures can somehow promote renewable energy?

Efstratios Kalogirou: For sure it is not a good situation to have the IMF here - civil servants' wages will plummet. On the other hand, it is a chance for the country to redirect the cash it spends on civil servants and pump it into the green economy.

This government has said it is committed to environmental reform - so now is the time to invest in renewable solutions - such as potable-water plants and [proper] waste disposal. It is an opportunity to develop the private sector as industry liberalises and new legislation is pushed through.

Are you satisfied with the law being proposed for renewable energy?

The new energy law is in the process of going through parliament at the moment. I have been actively trying to persuade the government to include in the bill the biodegradable portion of solid waste. This was a huge omission.

What will happen if burning biomass to produce electricity is not addressed in the new law?

It would mean that there would be no special tariff for burning biomass as a source of alternative energy. We are trying to get an amendment as this could deter foreign investors from entering this part of the sector.

I am meeting with Tina Birbili, the minister for the environment, energy and climate change, to lobby for an amendment to the law. We are hoping that at the very minimum biomass energy can receive 87.85 euros per megawatt hour, in the same category as the rest of renewables, such as wind energy. This will be better than being omitted altogether. It would have been good if biomass could have been priced at around 120 euros per megawatt hour - it would be more of an incentive for investors.

Conventional energy attracts a price of just 50 euros per megawatt hour - but some special categories of renewable energy, such as photovoltaics, attract 550 euros for energy pumped, by private investors, into the grid.

Who pays for that?

The energy goes onto the national grid via the Organisation of Managing the Greek System of Electricity Carriers, called DESMIE - a sister company to Public Power Corporation (PPC). DESMIE will pay any supplier of renewable energy to be pumped into the system.

Doesn't burning rubbish create greenhouse gases?

The environmentally friendly and energy-efficient thermal processing of waste-to-energy [WTE] is the only proven and dominant method. This technology is used in more than 430 plants across Europe which, in combination with recycling at the source, consists of an integrated and proven waste management practice.

European green capitals - Paris, Stockholm, Copenhagen, Hamburg - use a combination of recycling at the source and thermal treatment with energy recovery. According to the 2008/98 EU directive, a WTE plant is considered an energy recovery operation.

Energy recovered from thermal treatment of waste contributes to the reduction of greenhouse gases in two ways. It prevents the production of methane - [which is] 21 times more potent as a greenhouse gas than carbon dioxide (CO₂) - and other emissions from landfill sites. The process also emits less CO₂ than other fossil fuels used for energy production in Greece, such as lignite.

Are foreign investors really going to be attracted into Greece with all its problems?

Oh, yes - there are actually quite a few lined up to take advantage of the new energy law when it comes on board - these include Spanish, French and US companies. Indeed, PPC has just announced a big new waste management and industrial wastewater treatment joint venture initiative with Spain's Urbaser. I believe we can expect to see more such ventures. There is quite a bit of interest in biomass, too, if only we can get this amendment [to the law] included.

Burning desire

THE WASTE-TO-ENERGY Research & Technology Council (WTERT) is a non-governmental organisation comprised of engineers, scientists and managers from universities and the energy industry.

The group aims to identify and promote the best available waste-to-energy sources available across the globe, including municipal solid wastes and other industrial, agricultural, and forestry residues

Its global headquarters are located at Columbia University in New York City. WTERT Greece has organised a number of forums and green initiatives and has been part of parliamentary consultations on energy.

If passed in parliament, Greece's green energy bill will require that 20 percent of the country's electricity be derived from renewable sources by 2020, up from the current 18 percent outlined in European Union legislation. It will also establish a "national goal" of 20 percent for all the country's energy, including heating and cooling, to be produced by renewable energy by the same date.