

## Secon Solar Ltd Environmental Policy Statement

***We believe solar is a viable, well proven source of renewable energy and promote its application. We support the solar industry with quality products, service and technical support to help us all preserve resources for future generations.***

As our company grows we realise that we are using more of the earth's resources. Our operations can be largely summarised as the distribution of solar thermal ancillary equipment, shipping of equipment from abroad and the logistics to distribute to our customers. We also travel to run our business, train installers and commission on site.

We source equipment from companies who have for many years operated successful environmental management schemes within their production facilities. Resol for example have solar thermal, gas fired CHP with thermal storage, underfloor heating and extensive use of passive solar design in both their buildings. An electric vehicle operates a supply chain between the two buildings.

Our office and distribution centre is part of a Business and Innovation Centre set up as a social enterprise to create a sound framework for local business to succeed. The site was entirely brownfield as a former shipyard. During the remodeling, community heating, public transport and cycling provision were included - the site being very close to the C2C cycle track.

### Energy

Our business energy use broadly falls into 2 categories:

Gas - for space heating and hot water  
Electricity - for IT systems and lighting

Our current building is rented and the procurement of gas and electricity is taken by the landlords. We are charged according to use for electricity and on a floor area basis for heating and hot water. Floor area charging is often associated with poor motivation to energy efficiency, but not in our case. We adjust the heating time and boiler flow temperature controls to suit the season (in effect manual weather compensation and optimum start) and the warehouse heating is maintained by TRVs at a low level - typically 12-13°C in the heating season. Hot water is provided by an instantaneous appliance which is adequate for our relatively small domestic hot water needs and unfortunately difficult to change due to building ownership.

Electricity is sourced from the BIC management who secure a single supply based on price over which we unfortunately we have little control. However, this does not mean we are complacent over its use within the limits of a rented building.

- All office and warehouse lighting is fluorescent with T8 tubes and switch start ballasts, representing good practice at the time of building construction. We have removed tubes excess lighting fittings in the building such as in parts of the warehouse that were previously set up for intricate machine work.
- CFLs (Compact Fluorescent Lamps) are used in other areas.
- Stair lighting is halogen downlights, again dictated by the building. The lights are normally switched off as daylight is adequate and switched on as needed by staff. As the

50W lamps have failed, we have replaced them with 35W variants and plan to trial some GU10 LEDs.

- IT equipment exclusively uses flat screens, which consume less energy than CRT monitors. PC powersave modes such as screen shutdown and hard disk sleep modes are activated for 10 minutes.
- Printer sleep modes are activated, and all IT equipment is switched off at night
- The kitchen area has an A rated fridge and drinks machines with visible water level displays so only what is required is boiled.
- The building comfort cooling is switched off as we prefer natural ventilation on this riverside site.

Energy consumption monitoring has traditionally been on a bill verification process. We are establishing a data collection system for energy use that will ultimately feed into carbon reporting.

### New Building

We are currently procuring a new building on site. The office is currently being refurbished to suit modern office requirements from a former mezzanine level of the manufacturing area. Within this refurbishment we have negotiated the following energy related improvements over our existing building:

- Warehouse lighting - extensive roof glazing means natural daylight will be adequate for the majority of the working day throughout the year. Artificial lighting is by high bay HID lighting, offering a considerable efficacy improvement over fluorescent in the existing warehouse
- Warehouse heating - direct fired warm air heaters are fitted with interlock to the roller doors. We plan to heat the warehouse to minimum levels and create a warm refuge for staff breaks etc.
- Office heating - this building is not on the community scheme, so we are responsible for our own boiler plant and gas meter. Radiators are fitted with TRVs and the boiler plant has weather compensation, optimum start and time control.
- Office refurbishment - we have negotiated a sloping ceiling with the building owners to improve both natural lighting and ventilation. The ceiling includes translucent panels to allow natural lighting from the roof skin glazing.
- Office lighting - again switch start fluorescent, but zoned switching in rows from the window, enabling us to turn off units close to the windows
- Stair lighting - fluorescent lighting with considerably reduced circuit wattage from the existing building

### **Waste**

We try to cut down on waste wherever possible and reuse cartons and pallets extensively. Our waste streams are broadly:

Pallets and film wrapping  
Office paper  
Cardboard

- Discarded pallets are stored for collection by a local recycling firm when a truck load is collected. We understand they are chipped and fed into chain grate boiler plant in several County Durham Schools, thereby displacing coal as a heating fuel.
- Single side printed office paper waste is first cut into two and used as note paper, or used in the fax. Spent note paper and non-confidential double side printed waste is collected for recycling (confidential waste is shredded). Our centre management is currently seeking a waste contractor who will separate streams to offer to the whole site.
- Cardboard boxes and cartons are reused for deliveries wherever possible, but cardboard has a finite life. Any box deemed to have sufficient insufficient strength for delivery is cut up and used as padding within consignments.
- Pallet film wrap is used as padding within consignments
- Any glass, cans and/or plastic bottles from meetings and training events are collected and recycled. We encourage guests to use the onsite restaurant for lunch to minimise waste and also to support a valuable on-site service.
- Print and toner cartridges are sent to a recycling scheme that benefits various charities
- This company does not use polystyrene or plastic cups; glasses and ceramic mugs are provided. These are hand washed and air dried.
- We actively focus on email and web based communication.
- We operate an exchange or repair service on defective / vintage controllers with our suppliers so we never landfill electronic waste. Note for the purposes of WEEE, solar and heating controls are regarded as components of an electrical installation and therefore exempt.
- Any life expired ancillary components removed by us or sourced from and returned to us will be recycled with local scrap merchants

## **Water**

Our water is procured by the centre on a floor area charging basis. We have limited water use - mainly domestic hot water for kitchenette use. We have low, dual flush toilets installed in all WCs and no urinals.

## **Purchasing**

We are moving towards more environmentally friendly and fair trade products where possible and will always consider new product lines for evaluation.

- We have been trailing various recycled papers and experienced some problems with paper jams, double sheet feeds etc. We are now using IQ appeal, a FSC accredited multipurpose paper with success.

- We trailed paper bib bags for brass pipe fittings and found them to have inadequate rip stop protection for the sharp edges.
- Tea and coffee are currently bought from normal retail outlets with personal preference being the deciding factor.

Other goods and services are sourced from a range of suppliers.

## Transport

Our staff transport to work comprises a mixture of car, car-share, walking, bus and occasional cycling as weather and family commitments allow. All staff live within a 5 mile radius of site.

Company vehicles are regularly serviced, with weekly checks on tyre pressures and fluid levels to ensure optimum operation. We encourage staff to use the on board mpg meters to adapt driving style to ensure optimum economy. We always prioritise telephone and email support before visiting sites, but the nature of commissioning means this is not always possible.

We are well located for national and international travel connections. Trips to business centers such as London, Edinburgh etc are taken by train whenever possible and we offer to pick up visitors from either Newcastle Central or Seaburn Metro stations so they can optimise public transport links.

When flying is needed (e.g. to suppliers in Germany), Newcastle airport is the usual route, not least because it is accessible by Metro but also offers direct flights to our suppliers in Germany by Lufthansa regional. This airline does not have aggressive marketing and does not trivialise air travel as some operators would appear to.

Our business carbon emissions would also quite reasonably include freight as we distribute to our customers across the UK and Ireland. This is currently unquantified but we expect it would form a large component of our carbon emissions. We will seek information from our carriers if they are investigating this at all. It is potentially an academic debate as to whether the carbon emissions are attributable to us or our carriers - certainly any improvements they made in transport fleet could not reasonably be claimed as a saving for us.

Logistics varies according to the consignment, but we broadly have 3 methods of physical deliveries to our customers:

- Royal Mail
- Two national carrier companies
- A long established, local transport company as part of the national palletline+network

Many of our customers have traditionally been unable to take pallets, but as the industry grows this is changing. The advantages of pallets are in the volume to footprint ratio and using the available height of a truck far more effectively than is achievable with boxes alone. As part of the national pallet network, pallets can be grouped and routed to maximise trunk route filling of trucks. The national carrier companies we use tend to operate a hub and spoke arrangement to maximise trunk route efficiency.

