



## OFFSETTERS PROJECT DESCRIPTION

### FUEL SWITCHING & ENERGY EFFICIENCY IN BC GREENHOUSES



**SUNSELECT PRODUCE INC.** Carbon funds enabled the greenhouse operator to switch from a natural gas to a biomass boiler to meet the heating needs of an existing commercial greenhouse producing fruits and vegetables. Use of the biomass boiler for most of the facility’s heat requirements reduces annual operating emissions by 7,500 tCO<sub>2</sub>e relative to the natural gas baseline.

**HOW IT WORKS** A biomass boiler burns solid fuels such as wood waste. The heat produced circulates through the boiler tubes raising the water temperature and heating the greenhouse. This process only releases the same amount of CO<sub>2</sub>e into the air that would be released when the plant decomposes naturally. Because the biomass is collected from existing waste streams and displaces new consumption of natural gas, the displaced gas consumption constitutes an additional emissions reduction.

**WHY THIS PROJECT WAS CHOSEN** Without offset funds the financial payback for this installation was not viable and the greenhouse would have continued to use the conventional natural gas heating system. The installation is not common practice and yields savings in GHG emissions from standard practice. This also stands as a model for energy innovation and a switch to a lower carbon future.

**OTHER BENEFITS OF THE INSTALLATION** Beyond the direct climate benefits, this installation helps to overcome the primary threat to a viable local food sector in British Columbia: the high level of fossil fuel input generally required for growing food in Canada’s cold climate. In addition to the direct emissions reductions on site, we believe that this project makes local food production more viable, boosting the regional economy and reducing the need to import food from far away.

#### PROJECT AT A GLANCE

<b>Project Location:</b>	Aldergrove, BC CANADA
<b>Project Type:</b>	Energy Efficiency
<b>Credits generated per year:</b>	~7,500 tCO <sub>2</sub> e
<b>Verifier:</b>	AD Williams Engineering Inc.