


<p>Company Name and Contact Details:</p>	 <p>Massey University CENTRE FOR ENERGY RESEARCH</p>
<p>Massey University Centre for Energy Research (MUCER) Dr. Attilio Pigneri, Associate Director http://energy.massey.ac.nz A.Pigneri@massey.ac.nz +64 (0)6 3505600</p>	
<p>The Massey University Centre for Energy Research (MUCER) was established in 1996 following more than 25 years of research and education in the fields of renewable energy, energy management and climate change mitigation under the leadership of Professor Ralph Sims.</p> <p>MUCER bioenergy research highlights</p> <p><u>Biofuels</u> Professor Ralph Sims' seminal work in the area of biofuels, started under the auspices of the of the Liquid Transport Fuel Board in the late 1970s, has brought forward the development of the basic and applied technology for two distinctively New Zealand biofuel pathways, bioethanol from whey and biodiesel from tallow.</p> <p><u>Massey University Biochar Initiative</u> Dr. Pigneri has led, along with Prof. Mike Hedley from the Soil and Earth Sciences Group at Institute of Natural Resources, the development of the successful proposal to MAF for the establishment of the Massey University Biochar Initiative, a 3.3 mNZD, multi-year RD&D programme aimed at advancing the understanding of biochar as a GHG mitigation solution for New Zealand's primary sectors</p> <p><u>GHG accounting and Footprinting</u> An integrated GHG accounting model for the City of Palmerston North is currently being developed by Dr Attilio PIGNERI for the Palmerston North City Council (Water and Waste services) as a planning tool for GHG mitigation activities. Prof. Don Cleland has contributed to the development of the footprinting efforts for the dairy and kiwifruit industries, under the auspices of MAF.</p> <p>Other bioenergy research activities at Massey University MUCER is an aggregator of capabilities in the wider energy area within Massey. The work of the Centre is complemented by a number of other Centres.</p> <p><u>Centre for Environmental Technologies and Engineering (CETE)</u> The Centre established under the leadership of Prof. Andy SHILTON, is the leading NZ centre of expertise in environmental bioprocessing technology for water and land treatment. The work on the design and characterization of anaerobic digestion processes enhances greatly the capabilities held at Massey in the area of biogas power generation.</p> <p><u>Biochemical Engineering and Process Biotechnology Research Centre</u> The Centre, led by Prof. Yusuf Chisti, is host to a wide range of research activities in bioprocesses, some of extreme relevance to the energy area, particularly his most recent work on biodiesel production from algae feedstocks.</p>	<p>Core Skill(s):</p>
	<ul style="list-style-type: none"> • Process development and optimization • Energy analysis • Techno-economic assessment • Infrastructure planning
	<p>Biofuel Focus:</p>
	<ul style="list-style-type: none"> • Various activities on 1st, 2nd and 3rd generation biofuels
	<p>Core Product/Activity:</p>
	<ul style="list-style-type: none"> • Biofuels Research
	<p>Key Project Activities:</p>
	<ul style="list-style-type: none"> • Sustainability guidelines for Bioenergy Plants (OECD/IEA) • Commercialization of 1st and 2nd generation (OECD/IEA) • Biochar Initiative (MAF) • Review of the biofuel industry (Fulbright commission NZ)
	<p>Leading Edge:</p>
	<p>Massey University Centre for Energy Research (MUCER) and Massey University at large represent a leading knowledge bases on bio-energy engineering.</p>
<p>Investment Base:</p>	
<ul style="list-style-type: none"> • NZ 	
<p>Employees:</p>	
<ul style="list-style-type: none"> • 4 full-time MUCER faculty • several researchers and graduate students from Massey University 	
<p>Production Capacity</p>	
<p>N/A</p>	