



**EPECentre is a world-class clean technology research incubator that fosters collaboration and innovation.**

We are a leading independent electric power and clean technologies research group, delivering specialist world-class research and innovation. Through our collaborations over the past two decades, we have a strong understanding of the NZ Electricity landscape and NZ industry in general, including the manufacturing and primary sectors.



## Electro-magnetics

Motor, drive and actuator -

Find below an extensive experience list for EPECentre researchers.

Project	Client(s), Funder(s) and/or Supplier(s)	Related Programme
<b>Power System Engineering</b>		
Network Waitaki - Probabilistic EV Hosting Study	Network Waitaki	
EV charger testing	EECA	
International HVDC Consulting services and		



Project	Client(s), Funder(s) and/or Supplier(s)	Related Programme
Development of one dimensional model to predict the heating of anisotropic materials such as wood	STIMBR	<a href="#">Smart Electrode</a>
Three dimensional modelling of Joule heating in heterogeneous, anisotropic media, such as wood	STIMBR	<a href="#">Smart Electrode</a>
Process heat and energy modelling	IPL NZ, Boise-Cascade (USA)	
Process flow design, optimisation and instrumentation	Petrofac LLC	
Design of pneumatic scheme for log heating rig	STIMBR	<a href="#">Smart Electrode</a>
Optimisation of CAPEX and OPEX (including RAM) as a part of solution design	GE Tenders and contracts	
<b>Electromagnetic Solutions</b>		

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Patented magnetic components with optimally interleaved windings	Weir Electronics	
<b>Electronics &amp; Power Electronics Systems</b>		
FET education tool	Energy Education Trust NZ	
Near-field optical lithography using evanescent waves	IBM	
Photonic crystal devices including a slow light device	IBM	
World's smallest SRAM cell (circa 2004)	IBM	