

SIRACH Networking Meeting

Introduction to Newcastle University Energy Research

Professor Tony Roskilly
Sir Joseph Swan Centre for Energy Research



Sir Joseph Swan Centre for Energy Research

Institute for Sustainability

Chemical Engineering and Advanced Materials
Civil Engineering and Geosciences
Electrical and Electronic Engineering
Marine Science and Technology
Mechanical and Systems Engineering

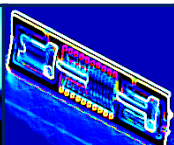
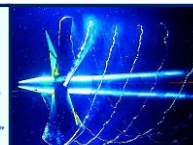
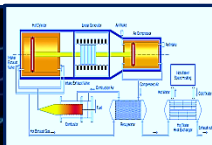
Agriculture, Food and Rural Development
Biology
Chemistry
Computing Science
Mathematics and Statistics

Institute for Health & Society
Institute for Cell and Molecular Biosciences

Architecture, Planning and Landscape
Newcastle University Business School
Geography, Politics and Sociology
Newcastle Law School

Institute for Ageing

Institute for Social Renewal



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Collaborative Research Centres

Transport Operations Research Group
Newcastle Railway Research Centre
Centre for Earth Systems Engineering
nanaLAB Research Centre

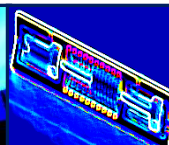
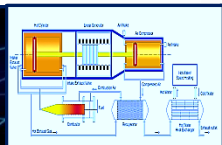
Centre for Urban and Regional
Development
Global Urban Research Unit
Centre for Rural Economy

Digital Connected Citizens and Communities
Cloud Computing for Big Data
Data, Risk & Environmental Analytical
Methods
North East Social Science

Siemens Smart Grid Laboratory
Urban Sustainability - Science Central
Rural Sustainability - Cockle Park Farm
Cloud Innovation Centre
Energy Storage Test Facility
Thermal Energy System Laboratory

Centre for Doctorial Training

Collaborative Facilities



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for Energy Research

Energy themes where Newcastle University has key research strength:

Resilient
Infrastructure and
systems

Intelligent networks
and energy storage

Electrochemistry and
hydrogen

Bio-resource
production, recovery
and use

Renewable energy
systems

Environmental impact
assessment and
mitigation

Building, industrial
and transport demand
reduction

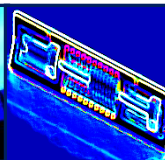
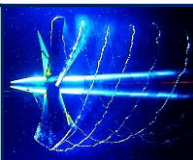
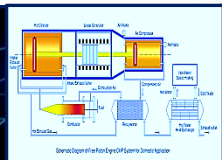
Justice and
governance

Logistics and planning

Clean use
of fossil fuel

Mechanical and
electric power
systems

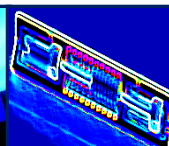
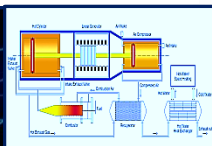
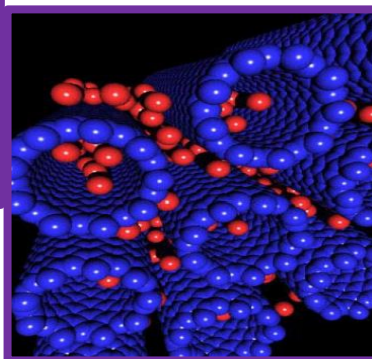
Thermal systems and
combustion



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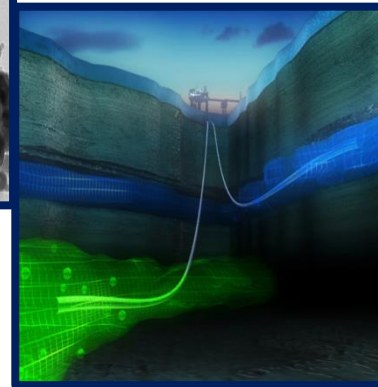
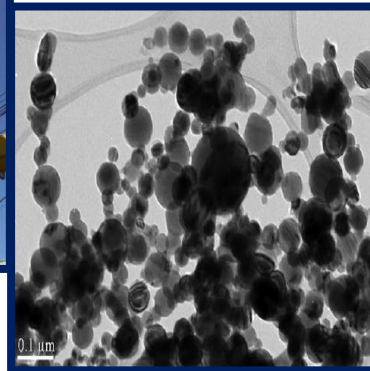
Energy themes where Newcastle University has key research strength:

Electrochemistry and
hydrogen

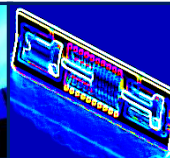
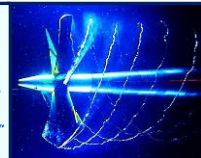
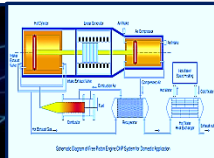


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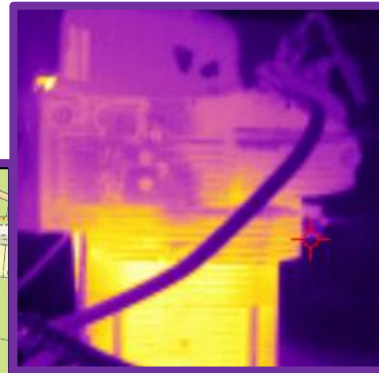


Clean use
of fossil fuel



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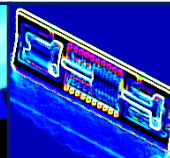
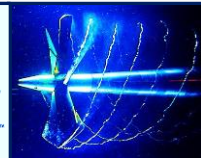
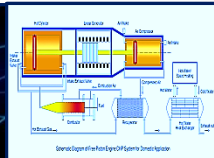
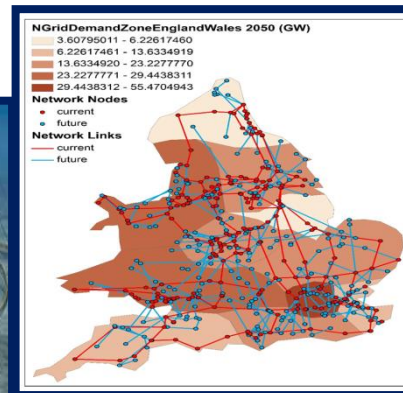


Thermal systems and
combustion

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Energy themes where Newcastle University has key research strength:

Resilient
Infrastructure and
systems

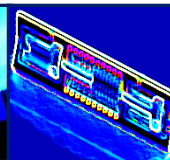
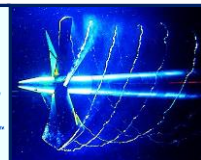
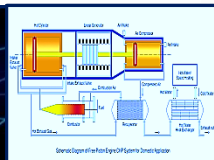
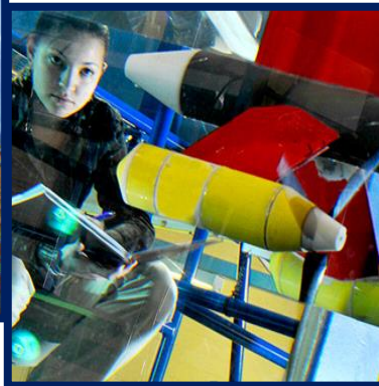


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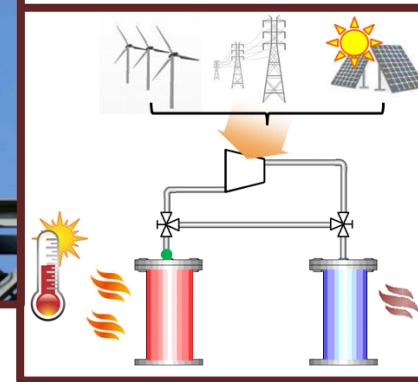
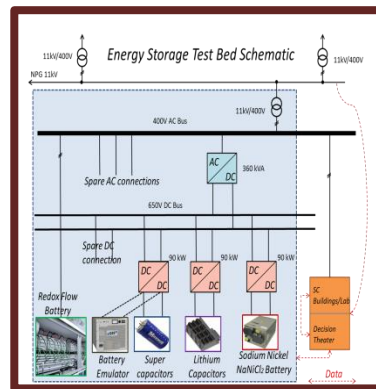
Renewable energy
systems



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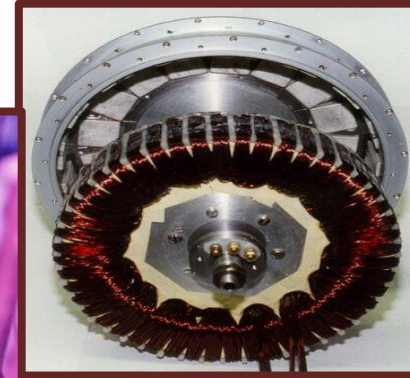
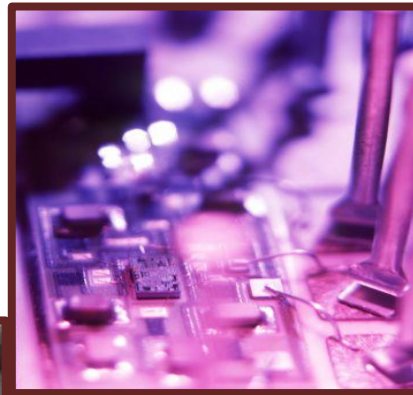
Energy themes where Newcastle University has key research strength:

Intelligent networks
and energy storage

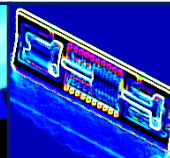
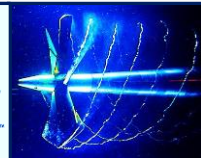
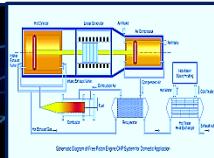


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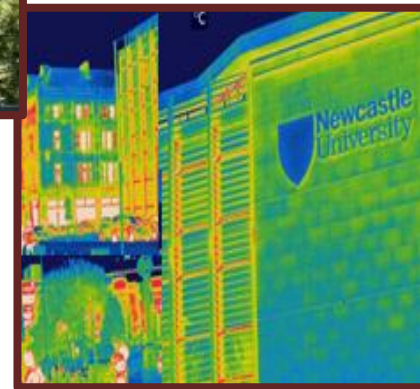


Mechanical and
electric power
systems



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Energy themes where Newcastle University has key research strength:



Building, industrial
and transport demand
reduction



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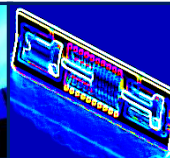
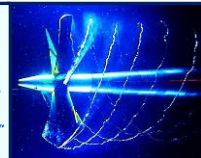
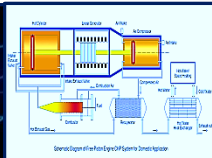
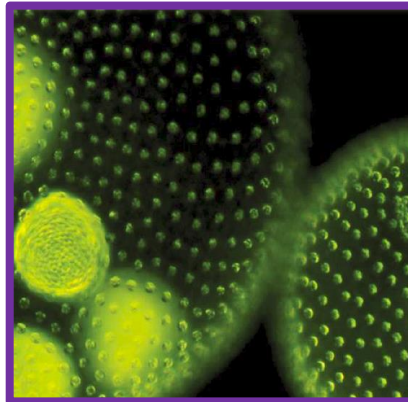


Logistics and planning

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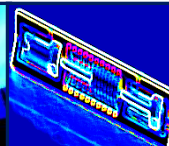
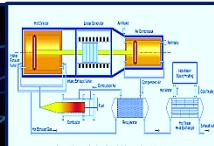
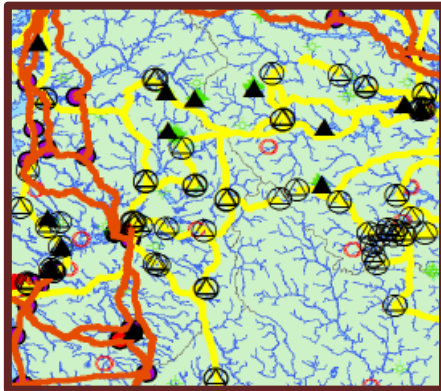
Bio-resource
production, recovery
and use



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Energy themes where Newcastle University has key research strength:

Environmental impact
assessment and
mitigation

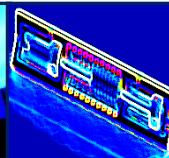
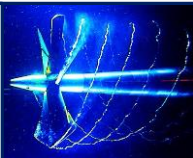
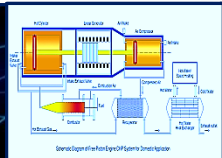


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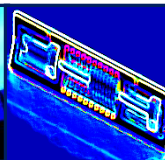
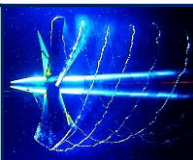
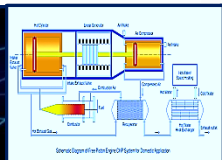
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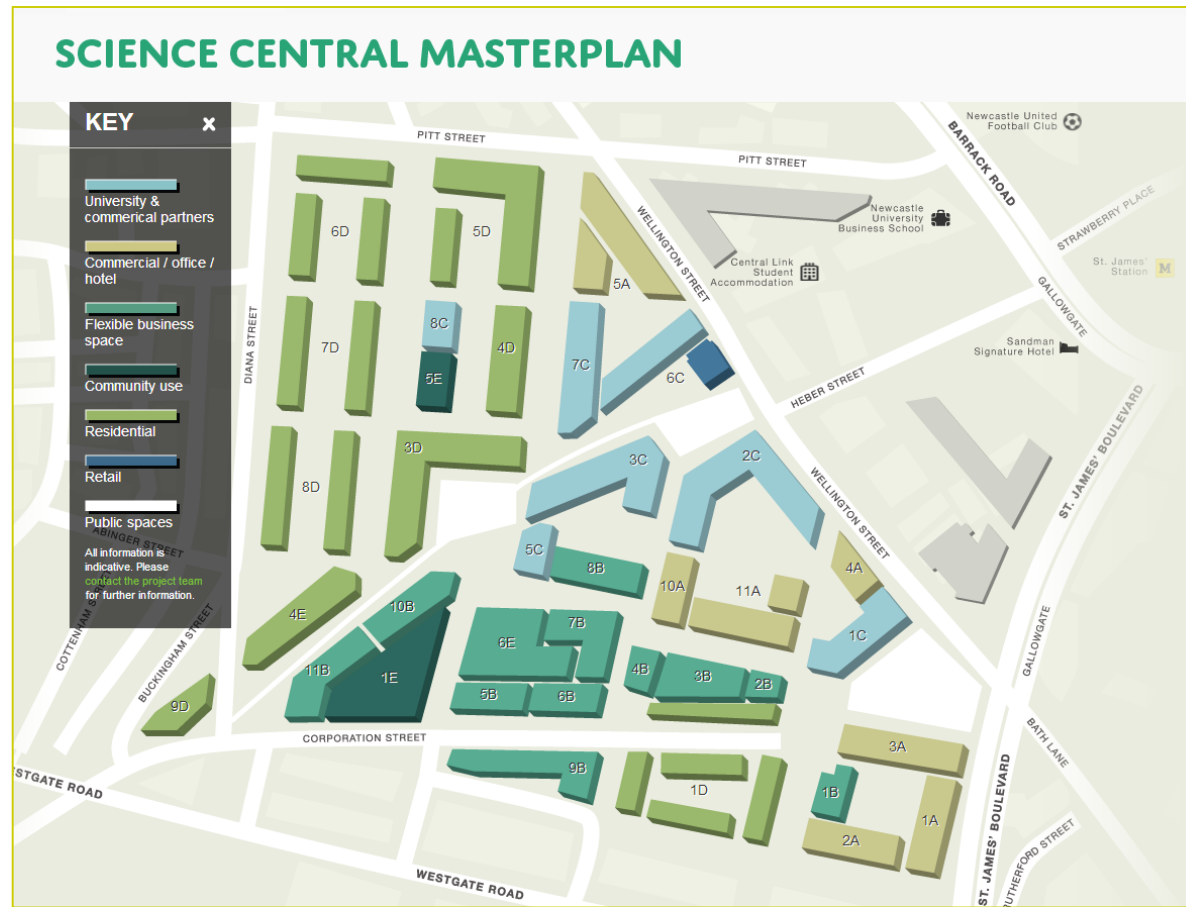
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Urban Sustainability (Science Central)



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Urban Sustainability (Science Central)



Sir Joseph Swan Centre for Energy Research



The building and the site as laboratories - Smart Grid, Energy; Power & Transport; Cyber Physical

Urban Observatory; Decision Theatre; Digital Civics; Cloud Computing

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Rural Sustainability (Cockle Park Farm)





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Web: <http://www.ncl.ac.uk/energy/people/profile/tony.roskill>

