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| Project ID | DIP029 | | |
| Long Title | Electricity and Heat | | |
| Short Title | | | |
| Keywords | Single Site; Non-domestic; Cooling; Heat pumps; Waste Heat Recovery; Thermal Storage; Power Quality & Grid Integration; Active Network Management; | | |
| Location (Town, Region, Country) | Warrington | Cheshire | England |
| Latitude and Longitude | 53.42N | 2.52W | |
| OSGB code | SJ 65 92 | | |
| Status | Ongoing | | |
| Start Date | 2016 | | |
| End Date | 2018 | | |
| Description | <p>Electricity demand will increase and change both through the adoption of low carbon technologies and general load growth; Including the increased deployment of air conditioning. As traditional reinforcement to accommodate this load could be costly and disruptive, new and innovative solutions are being sought. Air conditioning systems tend to release a significant amount of heat as a by-product which is currently a wasted resource.</p> <p>This project will investigate the feasibility of utilising the heat currently wasted to both improve overall energy efficiency (reducing electrical demand) and allow the electrical demand to be managed.</p> <p>The project will be conducted at a single location and help understand how benefits for a Distribution Network Operator and their customers can be derived from improved energy management. The scope of this project includes the adaption design work required to implement technology from other sectors in a trial site.</p> | | |
| Sectors | Non-domestic | | |
| Funding Sources | Network Innovation Allowance | | |
| Budget £ | £545,000 | | |
| Partners | Electricity North West, Futurebay | | |
| Energy vectors | Electricity, heat, cooling | | |
| Scale (lab/site/small /community/region/national) | Site | | |
| Technologies demonstrated | Waste heat recovery, thermal storage, heat pumps , active network management | | |
| Economic models demonstrated | | | |
| Other concepts demonstrated | Grid constraint mitigation | | |

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| Industry engagement | |
| Consumer engagement | |
| Project Reports (incl. links) | Progress report. https://www.enwl.co.uk/globalassets/innovation/enwl017/2017-nia-ppr-enwl0017-electricity-and-heat.pdf Technology patent. https://patents.google.com/patent/EP3256700A1/en |
| Datasets (incl. links) | |
| Website/social media | https://www.enwl.co.uk/innovation/smaller-projects/network-innovation-allowance-projects/enwl017---electricity-and-heat/ |
| Information sources | http://www.smarternetworks.org/project/nia_enwl017 |