Abstract

The decarbonisation of domestic energy consumption in rural areas is a critical challenge for meeting carbon reduction targets in the Northern Periphery and Arctic (NPA) region and the wider EU. Simultaneously, there is a growing recognition of the need to tackle rural energy poverty, with recent estimates suggesting that as many as 1 in 5 rural households in the EU may be living in energy poverty.   
  
This document is an annex to a report prepared by National Energy Action (NEA), the UK’s national fuel poverty charity, for the HANDIHEAT project. It reviews different policies and practices from across the EU according to seven heuristic criteria identified as important to successfully tackling rural fuel poverty. The intention of the matrix is not to offer judgement on different policies or projects, but to point towards the kind of policy mix that might be required to achieve the twin aims of addressing rural energy poverty and the deployment of low carbon technologies in rural areas across NPA and EU countries  
  
Authors: Dr Danielle Butler and Dr Matthew Scott, NEA

The Handiheat project

Low-carbon technology and rural energy poverty: policy and practice matrix

## Annex Two: Comparative policy matrix

| **Case Study** | **Country** | **Areas of focus** | **Actors** | **Core target group** | **Tackling energy poverty** | | | | **Other requirements** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Affordable** | **Accessible** | **Holistic** | **Rural** | **Multiple technologies** | **Subnational partners** | **Long-term** |
| [Raus aus Öl und Gas für Private 2021/2022](https://www.umweltfoerderung.at/privatpersonen/raus-aus-oel-efh-f-private-20212022.html) | Austria | -Heating system installation | National government | Owner occupiers, building owners, tenants | Covers 100% of cost | Complex application and reimbursement process | Insufficient evidence | Available, but not targeted | District heating connections, heat pumps, other heating types | No evidence | Set to end in 2022 |
| [Sanierungsoffensive 2021/2022](https://www.oesterreich.gv.at/themen/bauen_wohnen_und_umwelt/energie_sparen/1/sanierungsoffensive.html) | Austria | -Retrofit | National government | Owner occupiers, building owners, tenants | Covers up to 30% of costs | Complex application and reimbursement process | Insulation and window replacement scheme | Available, but not targeted | No heating systems included | No evidence | Set to end in 2022 |
| [REECL Programme](https://reecl.org/en/grants/about-grants/) | Bulgaria | -Heating system installation  -Retrofit | National government, participating banks, EU | No specific target group | Loan equal to 15% of total cost | Complex application and reimbursement process | Included energy efficiency measures (e.g. windows) | Available, but not targeted | Multiple technologies included | No evidence | Ended in 2018 |
| [Programme for the Energy Renovation of Family Homes](https://www.fzoeu.hr/hr/energetska-obnova-obiteljskih-kuca/5963) | Croatia | -Heating system installation  -Retrofit | National government | Family homes | 60% of costs co-financed | Insufficient evidence | Included energy efficiency measures (e.g. external door replacement) and insulation | Available, but not targeted | Solar thermal, solar PV, heat pump, wood/pellet systems | No evidence | Ran 2014-2020, and extended recently |
| [Installation or replacement of solar water heating systems in existing dwellings](https://www.fundingprogrammesportal.gov.cy/easyconsole.cfm/page/prog/prog_id/6114) | Cyprus | -Heating system installation | National government | No specific target group | Small lump sum towards cost | Insufficient evidence | No further measures included | Grant amount doubles in mountain areas | Solar thermal only | No evidence | Set to end in 2021 |
| [Encouragement of the use of RES and Energy Saving in dwellings](https://www.fundingprogrammesportal.gov.cy/easyconsole.cfm/page/prog/prog_id/6115) | Cyprus | -Heating system installation | National government | Vulnerable households | 35% of eligible costs | Insufficient evidence | Includes roof insulation | Available, but not targeted | Solar PV only | No evidence | Set to end in 2021 |
| [New Green Savings](https://www.energypoverty.eu/measure-policy/new-green-savings) | Czech Republic | -Heating system installation  -Renewable energy generation | National government, EU | No specific target group | On average, 30-40% of eligible costs | Insufficient evidence | Includes insulation, RES, greenroofing, and wastewater recovery | Available, but not targeted | Boilers, heat pumps, solar panels | No evidence | Continuous policy, now in third phase (2015-2021) |
| [Building Pool](https://energihjem.dk/tilskud/) | Denmark | -Heating system installation | National government | No specific target group | Varies, but unlikely to cover 100% of costs | Complex application and reimbursement process | Includes insulation and ventilation measures | Available, but not targeted | Heat pump only | No evidence | Current scheme running to 2026 |
| [Sparsely populated programme](https://rtk.ee/meede-hajaasustuse-programm#toetatavad-tegevused) | Estonia | -Heating system installation | National government, local regional/government | Rural areas | Up to 67% of overall costs | Relatively simple paper/online application to local government | Includes multiple non-energy measures (sewerage, water) | Targeted specifically at rural areas | Solar, wind, and storage technologies | Devolved through local government | Currently closed, but multiple rounds (2018-2021) |
| Renewable heating support | Finland | -Heating system installation | National government | No specific target group, but implicitly targeted at rural areas | 20-25% of overall costs covered, including % of labour costs | Complex application and reimbursement process | Insufficient evidence | Available, but not explicitly targeted | Heat pumps, wood based, solar | No evidence | Insufficient evidence |
| [MaPrimeRénov](https://www.ecologie.gouv.fr/evolutions-maprimerenov) | France | -Heating system installation | National government | Initially targeted at low-income households, now all property owners | Up to 20,000 Euros for low-income households, and targeted bonuses | Relatively simple process depending on income band | Includes insulation and ventilation | Available, but not targeted | Insufficient evidence | No evidence | Short application windows and no long-term extension |
| [Fragile Communities Program](https://www.byggdastofnun.is/is/verkefni/brothaettar-byggdir/verkefnalysing) | Iceland | Community development and support through collaborative means | Icelandic government | Smaller villages and remote rural communities | Dependent upon the priorities and actions identified by each participating community | Dependent upon the priorities and actions identified by each participating community | Dependent upon the priorities and actions identified by each participating community | Program is specifically targeted towards rural and remote communities | Specific approach determined by community so may include | Goals and actions are established and enacted by local community | Yes – running since 2012 and has expanded |
| [The National Retrofit Programme Community Energy Grant](https://www.seai.ie/grants/community-grants/project-criteria-and-funding/Community-Grant-Guidelines.pdf) | Ireland | Community led heating system installation, retrofit, and whole house upgrade | National government, housing associations, community organisations, public sector organisations, local authorities | No specific target group, but has incentive and provision for targeting energy poor households | Covers up to 80% of cost for energy poor homes, with support to bridge the remaining 20% | Mediated through community groups to maximise accessibility | Aims to link to Ireland’s network of One Stop Shops | Available, but not targeted | Insulation, renewable energy heating systems, smart meters, and others. | Aimed at community groups, housing associations, and other local actors | Unclear |
| [Warmth and Wellbeing Pilot Scheme](https://www.seai.ie/grants/home-energy-grants/free-upgrades-for-eligible-homes/warmth-and-wellbeing/2018-10-WarmthWellbeingA5Booklet.pdf) | Ireland | -Heating system installation (but note they are gas and oil boiler, not LCT) | National government | Targeted at cold-related health conditions | Covers 100% of cost | Referral system through healthcare providers | Includes insulation and ventilation | Available, but not targeted | Gas and oil boiler only, no LCT | Referral based through local healthcare providers | Pilot scheme |
| [Solar PV](https://www.rews.org.mt/#/en/a/197-2019-pv-grant-scheme) and [Heat Pump](https://www.rews.org.mt/#/en/a/175-heat-pump-water-heater-scheme-2018-hp) schemes | Malta | -Heating system installation | National government | No specific target group | Covers up to 50% of costs | Insufficient evidence | No further measures included | Available, but not targeted | Separate schemes for solar PV and heat pump | No evidence | Closing 2021 |
| [Keep Warm](https://www.uregni.gov.uk/sites/uregni/files/media-files/NISEP%20List%20of%20Schemes%202020-2021.pdf) | Northern Ireland | -Retrofit | National government, management agent and delivery partner | Low-income homeowners and private tenants | Covers 100% of costs | Insufficient evidence | Includes free advice, and hot water tank jacket/LED light bulbs | Mid-income single person households have special eligibility if they live in rural area | Does not include provision for heating system replacement | No evidence | Covers 2020-2021 |
| [Clean Air Programme](https://czystepowietrze.gov.pl/do-pobrania-2/) | Poland | -Heating system installation | National government, participating banks | No specific target group | Additional 12,000 PLN for low-income households | Simplified application process following earlier rounds | Includes insulation, but with restrictions | Available, but not targeted | Heat pump and solar PV combinations encouraged | Administered through local government units | Has been through multiple iterations |
| [Economic and Social Stabilization Program (PEES)](https://www.fundoambiental.pt/avisos-2020/mitigacao-das-alteracoes-climaticas/programa-de-apoio-a-edificios-mais-sustentaveis/resumo-do-programa-de-apoio-edificios-mais-sustentaveis.aspx) | Portugal | -Heating system installation  -Retrofit | National government | No specific target group | Limit on contribution up to 3,000 Euros | Insufficient evidence | Includes renovation measures | Available, but not targeted | Heat pumps, solar, biomass | No evidence | In place 2020-2021 |
| [Home Energy Scotland Loan](https://www.homeenergyscotland.org/find-funding-grants-and-loans/interest-free-loans/) | Scotland | -Heating system installation  -Retrofit | Scottish government, managed by Local Energy Scotland | Homeowners, landlords, property developers | Zero interest loans that must be repaid | Made more accessible through advice provision | Includes several additional measures and advice/support | Available, but not targeted | Numerous heating technologies included | Mediated through community development officers and [CARES programme](https://www.gov.scot/policies/renewable-and-low-carbon-energy/local-and-small-scale-renewables/#cares) | Yes, ongoing |
| [Green Households II](https://zelenadomacnostiam.sk/sk/domacnosti/) | Slovakia | -Heating system installation  -Renewable energy generation | National government | Family and apartment houses | Covers 50% of expenditure | Insufficient evidence | No evidence of additional measures | Available, but not targeted | Heat pumps, solar, biomass | No evidence | In place from 2019-2023 |
| [Green Homes Grant](https://www.gov.uk/guidance/apply-for-the-green-homes-grant-scheme) | UK | -Heating system installation  -Retrofit | National government | -Low-income households  -All households | Covers 100% of cost for low-income households | Complex voucher application process, but simpler through local authority delivery element | Included secondary energy efficiency measures | Available, but not targeted | Heat pumps, solar thermal, biomass | Local authority delivery element | Local authority delivery continuing |
| [Domestic Renewable Heat Incentive](https://www.ofgem.gov.uk/environmental-programmes/domestic-rhi) | UK | Funding for renewable sources | National government | Homeowners and private and social landlords | No assistance with upfront install costs | Complex application and payment process | No evidence of additional measures | Available, but not targeted | Heat pumps, solar, biomass | No community or local government involvement | In place since 2014 |