

Residential energy upgrades workforce mapping

Scoping the professional development needs of energy services professionals and tradespeople involved in retrofitting and building homes to improve energy efficiency, health and comfort outcomes in support of a net zero economy

Information sheet – March 2022

Project summary

The Energy Efficiency Council (EEC) is undertaking a workforce mapping exercise to scope the professional development needs of energy services professionals and tradespeople involved in retrofitting and building homes to improve energy efficiency, and health and comfort outcomes in support of a net zero economy.

This workforce mapping exercise will identify gaps in professional development pathways for energy services professionals and tradespeople and clarify how industry and government can work together to fill these gaps. In particular, the work will posit the key roles associated with efficiently electrifying Australian homes, and map out professional development pathways for these roles, supporting industry and government with driving people into the sector to support Australia's energy transition and net zero transformation.

Background

According to modelling from Climateworks Centre, Australia's buildings sector needs to achieve zero emissions by 2035 in order to reach our economy-wide target of net zero emissions by 2050.¹ Australian governments have recognised the importance of improving the energy efficiency of residential buildings, and introduced a range of strategies, policies and programs that include:

- The [Trajectory for low energy buildings](#);
- The [National Construction Code \(NCC\)](#);
- The [National House Energy Rating Scheme \(NatHERS\)](#); and
- The [National Framework for Disclosure of Residential Energy Efficiency Information](#).

To complement these strategies and policies, we need to ensure that our workforce is adequately numerous and has the requisite skills to build high-efficiency new homes and retrofitted existing homes. Whilst we undoubtedly need to support the professional development of tradespeople undertaking the energy upgrade activities, a particular challenge is that, currently, very few homes each year undergo comprehensive energy efficiency retrofits, with upgrades to homes tending to be piecemeal. There is no recognised role that currently exists that can identify, specify, and coordinate holistic retrofit activities for residential buildings. Enhancing the capacity and capability of the workforce to understand holistic retrofits, as well as the interaction of various energy upgrades for a healthy, comfortable home, is necessary to enable the existing and new residential building stock to meet Australia's net zero goals.

¹ ClimateWorks Australia 2020, [Decarbonisation futures: solutions, actions and benchmarks for a net zero emissions Australia](#), ClimateWorks Australia, Melbourne.

Project purpose

To develop a report that:

- Maps the professional and trades activities, roles and skills involved in retrofitting and building homes to improve energy efficiency, comfort and health outcomes in support of a net zero economy, with particular emphasis on thermal performance and efficient electrification;
- Identifies gaps in the professional development pathways – including training, qualification and/or certification – of key roles that are essential to residential energy upgrades and building the associated workforce; and
- Clarifies how industry and governments can work together to fill these gaps in line with the [Trajectory for low energy buildings](#).

The 'residential energy upgrades workforce mapping' report will include:

- A professional and tradespeople workforce map;
- Professional development pathways for key roles; and
- Recommended priority actions/next steps for industry and government in the form of a 'residential energy upgrades workforce development roadmap' regarding capability and capacity building efforts in support of healthy, comfortable, decarbonised and low energy cost Australian homes.

Project scope

The EEC will:

1. **Review previous skills assessments and capability building efforts** in the residential building sector, and undertake analysis that considers current needs for households to decarbonise whilst minimising energy bills and supporting health, comfort and wellbeing of residents;
2. **Develop a draft 'professional and tradespeople workforce map'** that posits the activities involved in retrofitting and building energy efficient homes, alongside the associated roles, skills and training required to support a growing, sophisticated market for residential energy upgrades that support thermal performance and efficient electrification powered by renewable energy;
3. **Engage with residential energy upgrades experts and industry, government and other key stakeholders** to test and refine the map, and determine 'key roles';
4. **Develop professional development pathways for the key roles**, highlighting gaps that need to be filled, such as the development of training and, if and where appropriate, amendment or development of certifications and qualifications;
5. **Consult with industry, government and other key stakeholders** on:
 1. The professional development pathways for the key roles; and
 2. Exploring priority actions/next steps for the 'residential energy upgrades workforce development roadmap'; and
6. **Publish the final 'residential energy upgrades workforce mapping' report and joint industry statement in support of the 'residential energy upgrades workforce development roadmap'.**

Further information

This project is taking place from March to June 2023. Questions or comments should be directed to the EEC's Buildings Policy Advisor, Julianne Tice at julianne.tice@eec.org.au.