

Terms of Reference

Consultant, District Energy in Cities

Data collection for project pre-feasibility in Chile

Overview

The Copenhagen Centre for Energy Efficiency (C2E2) is seeking proposals from qualified and experienced consultants to support the data collection process to undertake a project pre-feasibility study on district energy in the city of Temuco, Chile. The district energy pre-feasibility study will contribute to the ongoing support of the UN Environment-led District Energy in Cities Initiative to Temuco. C2E2 is a lead partner of this global Initiative.

Building owners and tenants in Chile heat their buildings using a variety of fuels, in particular wood, paraffin, electricity and gas. One district heating network already exists in Santiago, however no expansion to this network has been considered since its construction during the 1960s. Heating in many cities is linked significantly to local air pollution, for example, 30% of air pollution in Santiago caused by firewood leading to regulations limiting use of wood burning heaters during air pollution peaks and to phase out the most polluting heaters.

In the South of Chile winters are very cold and heating is a necessity. The use of wood in inefficient wood stoves leads to significant air pollution in the heating season and the government of Chile has launched several programmes to tackle this pollution, focused on the heating sector.

In many cities in Chile, simple boiler fed district heating is unlikely to provide cheaper heat than existing solutions, particularly given the limited extent of central heating in buildings. Innovative business models, cogeneration and alternative fuels, regulations on polluting technologies, local and national financial incentives, connection policies and supportive local planning policies all need to be assessed in the context of Chile's liberalised energy market.

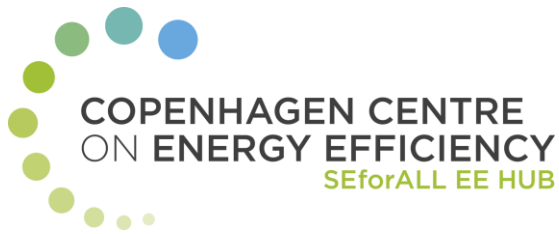
Objectives:

- Support the data collection process to complete a project pre-feasibility study in the city of Temuco (Chile).

Scope of work:

Support the data collection process to complete a project pre-feasibility study in the city of Temuco (Chile). The data collection will focus on 25 public and private buildings situated in the area of Balmaceda, in Temuco, Chile, and will include:

- Information on type of building, year of construction, type of insulation, if refurbishments are expected, total surface.



- Information on the current heating system, fuel used, annual consumption, annual heating tariff, power installed, average daily temperatures.
- Information on the installed hot water system, hot water consumption, annual consumption of hot water, annual bill for hot water.
- Information on existing cooling systems, power installed and annual consumption.

Deliverables:

- Data collection summary report in word and excel format including the information listed above for each of the 25 buildings selected.

Timeline:

The assignment will be of thirty days. Deliverables should be submitted 30 days upon contract signature.