

# UNIVERSAL CERTIFICATION SYSTEM FOR INDIA'S SERVICING TECHNICIANS: A PROMISE OF SKILL, SAFETY AND SOCIAL SECURITY

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Responding to overt safety concerns of COVID-19 have led to many ripples across the economy; and the AC servicing sector, like several others, has been faced with its own set of challenges. With back-migration of several technicians, as well as many local servicing shops seeing closures, as a result of financial distress, online service providers that promise adequate safety and precautions have seen a substantial increase. In addition to these reason, that there is an aggregation of service providers for residents to choose from has been a critical reason for this increased success for companies such as Urban Company and others. While consumers gradually move to formal service providers in the face of the current pandemic, CEEW research has shown that most consumers remain largely unaware of what 'good servicing practices' are and how much these can actually impact the efficiency of serviced units and minimizing emissions resulting from refrigerant leakages<sup>1</sup>.

Training and certification system can ensure effective management of servicing practices as well as enhanced adherence to quality servicing requirements. This can be integral towards inducting servicing technicians into the formal economy and providing access to social security, as well as a baseline to further enhance their own trainings and qualifications to avail of enhanced employment opportunities and job growth. These are extremely important concerns as servicing alone is responsible for maintaining cooling and efficiency of serviced equipment/appliances, and especially keeping in mind that the entire air conditioning sector is undergoing a gradual technology change, in an attempt to phase out high global warming potential (GWP) refrigerants to climate-friendly gases such as synthetic lower GWP HFCs, HFOs, blends of HFO/HFCs as well as natural refrigerants. Such a technology change carries several ramifications for servicing practices and technicians carrying these out. The most immediate result of this refrigerant change is an increased concern for safety: most low-GWP alternatives to the current generation of refrigerants are either more flammable or more toxic.

In response to these concerns, the Indian Cooling Action Plan (ICAP) aims to train and certify 100,000 servicing sector technicians by the year 2022-23 and achieve universal and mandatory certification of technicians over the next two decades. The Electronic Skill Sector Council of India's (ESSCI'S)

ongoing Recognition of Prior Learning (RPL) programme is a move towards achieving this target. It focuses on reskilling and certification of the servicing sector technicians and is a welcome start to testing a system that will have to be scaled and differentiated significantly over time. In doing so, CEEW conducted targeted research to recommend an institutional design that is based on the principles of safety, equity, accessibility, environmentally-sound practices, job security and enhanced livelihoods and social security for technicians. To enable the meeting of such goals and principles, the design of a certification system will have to be accessible, affordable, and independent. Based on an analysis of the current programme being run by the Ozone Cell and ESSCI, researchers at CEEW in consultation with these nodal agencies have suggested the an institutional design that ensures independence, accessibility and affordability<sup>2</sup>. (See Table 1 below)

Furthermore, this research outlined a typology of certification levels keeping in mind the growing needs of different sectors, and technology changes therein, to ensure that the job demand will be met domestically as per the following knowledge levels. Following are some of the examples of certifications identified:

- **Type 1.** Basic certification for small units (refrigeration and air-conditioning units, including vehicles) having HFCs
- **Type 2.** Basic certification for small units (refrigeration and air-conditioning units, including vehicles) using alternatives to HFCs (with clear markings of which refrigerant the technician is able to handle)
- **Type 3.** Intermediate recycling certification for all small units (refrigeration and air-conditioning units, including vehicles)
- **Type 4.** High-level certification for servicing larger units based on charge size and pressure for different refrigerants - with clear markings of which refrigerant the technician is able to handle. Applications would include commercial refrigeration, reefer transport, and other larger vehicles/ transportation modes.
- **Type 5.** Universal certification for servicing and recycling of small and larger units based on charge size and pressure for different refrigerants - with clear markings of which refrigerant the technician is able to handle. Applications

<sup>1</sup> Bhasin, Shikha, Apurupa Gorthi, and Vaibhav Chaturvedi. 2020. *Do Residential AC Buyers Prioritise Energy Efficiency? Indian Consumer Perception and Purchases*. New Delhi: Council on Energy, Environment and Water.

<sup>2</sup> Bhasin, Shikha, Apurupa Gorthi, and Vaibhav Chaturvedi. 2020. *A Universal Certification System for India's Refrigeration and Air-conditioning Servicing Sector*. New Delhi: Council on Energy, Environment and Water.

**Table 1.** Institutional Certification for Servicing Technicians in India: Recommended Blueprint

Role	Primary responsible institution	Secondary responsible institution
<b>Certifying agency</b>	ESSCI	Ministry of Skill Development and Entrepreneurship (MSDE) and Ozone Cell, Government of India
<b>Evaluators (or assessors)</b>	Empanelled by ESSCI	MSDE and Ozone Cell, Government of India; and industry
<b>Testing centres</b>	ESSCI-recognised public and private institutions with required equipment and infrastructure for testing.	Ministry of Human Resources and Development, MSDE, and Ozone Cell, Government of India
<b>Trainers</b>	Open to all private and public actors	Trainers should be recognised preferably by the MSDE and Ozone Cell, Government of India
<b>Training centres</b>	Open to all private and public actors	
<b>Curriculum and qualification pack</b>	ESSCI	Ozone Cell, Government of India

Source: CEEW 2020

would include small refrigeration and air-conditioning units, including vehicles, commercial refrigeration, reefer transport, other larger vehicles/ transportation modes.

India's certification system should be multi-focused and achieve the simultaneous goals of recognition, qualification, validation, and skill upgradation. It should act as a registrar of qualified technicians, provide them with certification based on regularly conducted theoretical tests and practical exams, create a roster system for re-evaluation consistent with

### Principles to guide the development of India's certification system

1. **Equitable** - The certification system must be designed to enhance the livelihoods of the existing technicians as well as the new technicians. The training and qualification packs for which the certification system will test the technicians should be made accessible to all the existing and prospective technicians.
2. **Independent** - The training and certification agencies should remain independent of each other, institutionally. The same agency should not be made singularly responsible for the implementation of training and evaluating the technicians on their trained skills. This should be done to ensure a disciplined, focused, efficient and unbiased training and certification system.
3. **Internalising safety and environmentally sound practices** - Servicing practices should be safe for the servicing technician as well as the environment. The certification system must establish environmental best practices and include them in the training curriculum, making every technician aware of them.
4. **Improved livelihoods** - The certification system will play a huge role in recognising the technicians that work in the servicing sector and validating their knowledge and skills, for differing employment opportunities.
5. **Access to welfare** - The certification system will formalise the servicing sector which will help enhance access to social welfare programmes.

market changes in technologies every five years, and create a livelihood upgrade system and offer the different type of certifications based on different levels of training. It must include the technicians from all the sectors of cooling- CAC, RAC, MAC and different sectoral targets must be announced. This cannot be managed by the government alone, and would require collective actions from industry, consumers, researchers, and technicians themselves. The success of such a system would be a bold example of India's leadership in ensuring jobs, sustainability and growth for its cooling sectors.