

## PROFESSIONAL APPRENTICESHIP MAY 2025 CONSTRIBUTIONE

SUCCESS CASE 5.2025

# PROFESSIONAL APPRENTICESHIP FOR BLUE COLLARS



## THE CHALLENGE

The DSO faced a significant challenge due to a strong need for specialized blue-collar workers in electric distribution networks. The demand for skilled technicians and field operators has risen as a result of the energy transition and grid modernization. However, there is a notable shortage of qualified personnel, which made it difficult for the DSO to meet the growing operational needs. The lack of specialized workforce created operational bottlenecks and posed a risk to maintaining service quality and expanding infrastructure in line with the energy transition goals.

### THE SOLUTION

To address this challenge, the DSO implemented a 3-year apprenticeship program. This program combines theoretical training and hands-on experience, with the curriculum alternating between theoretical instruction in training centers (approximately 640 hours) and on-the-job mentoring in the field. The program emphasizes safety and environmental considerations in primary substations and MV/LV networks. It also focuses on developing advanced technical skills beyond standard grid installation and maintenance, including specialized training in areas such as smart grids, network automation systems, and IoT technologies.

#### MAIN ACHIEVEMENTS

- Increased Workforce Capacity: The apprenticeship program successfully trained a new generation of specialized workers, bridging the skills gap and meeting the rising demand for technicians and field operators.
- Enhanced Skill Set: The participants gained expertise not only in traditional grid operations but also in emerging technologies, such as smart grids and network automation.
- Improved Safety and Efficiency: A strong emphasis on safety and environmental aspects helped minimize operational risks and ensured compliance with industry standards.



• Better Alignment with Energy Transition Goals: The new workforce is better equipped to support the ongoing energy transition and the modernization of the grid infrastructure.

## **KEY SUCCESS FACTORS**

- Strong Training Infrastructure: The combination of theoretical and practical training ensured that workers gained both foundational knowledge and real-world experience.
- Continuous Program Adaptation: The apprenticeship program was continuously revised to keep pace with technological advancements and evolving technical procedures in the electric distribution network.
- Partnerships and Mentorship: On-the-job mentoring played a crucial role in developing practical skills and fostering the transfer of knowledge from experienced professionals to the new workforce.
- Commitment to Safety: A clear focus on safety and environmental training ensured a reduction in risks and enhanced operational reliability.

### WAY FORWARD

- Scale-up the Program: The DSO plans to scale up the apprenticeship program to train more technicians and field operators in response to increasing demand.
- Enhance the Curriculum: The DSO aims to further develop and refine the training curriculum to incorporate emerging technologies, ensuring that workers are equipped to handle future challenges.
- Strengthen Recruitment Efforts: Focus will be placed on attracting more talent into the program to address the ongoing shortage of skilled workers in the sector.
- Long-term Development: Continuous monitoring and adaptation of the program to align with technological advancements and market needs will ensure the DSO has a sustainable, skilled workforce for years to come.