Electric Mobility Planning Training Course

Professional Development Training Course Outline

Category	Renewable Energy	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Electric Mobility Planning Training Course provides a comprehensive, future-focused understanding of how cities, governments, transport authorities, businesses, and infrastructure providers can design and implement sustainable electric mobility ecosystems. As transportation rapidly shifts toward electric vehicles (EVs), smart mobility, zero-emission transport, renewable energy integration, intelligent transportation systems (ITS), and low-carbon urban mobility, professionals need practical skills to plan EV adoption, charging infrastructure, fleet electrification, mobility services, and enabling policies. This course explores the complete e-mobility value chain, including EV market development, charging networks, grid readiness, transport modelling, fleet transition, battery technologies, data-driven mobility planning, and sustainable urban transport strategies.

Participants will gain practical knowledge to develop EV deployment strategies, electric bus and fleet transition plans, charging infrastructure master plans, investment frameworks, mobility-as-a-service (MaaS) concepts, and net-zero transport roadmaps. Through real-world case studies, scenario planning, feasibility assessment, stakeholder engagement, technology evaluation, and implementation planning, the training connects strategic policy with practical project delivery. The course is particularly relevant to professionals supporting the global transition toward decarbonized transportation, climate-resilient cities, smart cities, energy transition, green infrastructure, and net-zero mobility.

Programme Curriculum

Electric Mobility Planning Training Course

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Course Duration

5 days

Course Objectives

By the end of the course, participants will be able to:

1. Develop strategic electric mobility and EV transition roadmaps aligned with national and urban transport priorities.
2. Assess EV market trends, technology readiness, adoption barriers, and mobility demand.
3. Plan optimized and scalable EV charging infrastructure networks.
4. Evaluate fast charging, ultra-fast charging, smart charging, and vehicle-to-grid (V2G) opportunities.
5. Design electric bus, taxi, corporate, logistics, and public-sector fleet electrification strategies.
6. Apply data-driven mobility planning, transport modelling, GIS, and scenario analysis to EV deployment.
7. Integrate renewable energy, energy storage, smart grids, and EV charging into mobility strategies.
8. Assess total cost of ownership (TCO), lifecycle costs, business models, and investment requirements.
9. Develop effective EV policies, incentives, regulations, standards, and public-private partnerships.
10. Evaluate the environmental impact of EV programmes using carbon reduction, emissions, and lifecycle assessment approaches.
11. Address battery lifecycle management, second-life applications, recycling, and circular economy opportunities.
12. Develop implementation frameworks using KPIs, monitoring systems, digital platforms, and stakeholder engagement.
13. Prepare practical net-zero transport and sustainable electric mobility action plans for cities, regions, and organizations.

Target Audience

1. Transport planners and urban mobility professionals
2. Government officials and transport policymakers
3. Municipal and smart-city planners
4. EV charging infrastructure developers and operators
5. Energy, utility, and power-sector professionals
6. Fleet managers and logistics professionals
7. Automotive and mobility industry professionals
8. Consultants, project managers, investors, and sustainability professionals

Course Modules

Module 1: Electric Mobility Ecosystem & Global Trends

- Global **EV transition, zero-emission mobility, and decarbonization** trends
- EV technology landscape: **BEV, PHEV, electric buses, trucks, two-wheelers**
- Electric mobility value chain and key market stakeholders
- **Smart mobility, connected mobility, autonomous mobility, and MaaS**
- **Case Study:** Emerging trends, disruptive technologies, and future mobility scenarios

Module 2: EV Market Assessment & Mobility Demand Planning

- EV adoption forecasting and **market penetration modelling**
- Analysis of travel behaviour, mobility demand, and vehicle-use patterns
- **Total Cost of Ownership (TCO)** and EV competitiveness assessment
- Consumer adoption barriers, incentives, and behavioural change
- **Case Study:** Development of **EV transition scenarios and demand forecasts**

Module 3: EV Charging Infrastructure Planning

- Charging technologies, standards, connectors, and charging levels
- **Public, workplace, residential, depot, destination, and highway charging**
- Site-selection methodologies using **GIS and spatial analysis**
- **Case Study:** Charging demand forecasting and network optimization
- **Fast charging, ultra-fast charging, smart charging, and interoperable networks**

Module 4: Electric Fleet & Public Transport Electrification

- **Electric bus transition planning** and depot electrification
- Fleet profiling, route analysis, duty cycles, and energy requirements
- Electric taxi, delivery, logistics, municipal, and corporate fleet strategies
- Fleet **TCO, lifecycle cost, charging and operational optimization**
- **Case Study:** Workforce, procurement, maintenance, and transition management

Module 5: Energy Systems, Smart Grids & Renewable Integration

- EV charging impacts on **electricity grids and distribution networks**
- Smart charging and **demand-side management**
- Integration of **solar PV, battery energy storage, and EV charging**
- Vehicle-to-grid (**V2G**), vehicle-to-building (**V2B**), and bidirectional charging
- **Case Study:** Energy forecasting, load management, and grid resilience

Module 6: Policy, Regulation, Finance & Business Models

- **EV policies, regulations, incentives, standards, and compliance**
- Public-private partnerships (**PPP**) for charging infrastructure
- EV charging business models and revenue streams
- Investment appraisal, financial feasibility, and funding mechanisms
- **Case Study:** Development of **bankable electric mobility projects**

Module 7: Sustainable Mobility, Data & Digital Transformation

- **Smart mobility platforms, IoT, telematics, and mobility data**

- Transport analytics, dashboards, KPIs, and real-time monitoring
- **Mobility-as-a-Service (MaaS)** and integrated transport systems
- **Case Study:** Carbon accounting, emissions reduction, and lifecycle assessment
- **Circular economy, battery recycling, second-life batteries, and ESG**

Module 8: Electric Mobility Master Planning & Implementation

- Preparation of an integrated **Electric Mobility Master Plan**
- Stakeholder mapping, consultation, and institutional coordination
- Implementation roadmaps, milestones, budgets, and investment priorities
- **Risk management, KPIs, monitoring, evaluation, and continuous improvement**
- **Case Study:** Development of practical **net-zero transport and EV deployment action plans**

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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