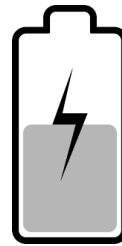




ForeSee Advisors



Website: www.foreseeadvisors.in

Delhi | Mumbai | Bengaluru

2024



Introduction: ForeSee Advisors is a leading consulting firm dedicated to providing innovative solutions in the fields of clean energy, electric mobility, and advanced battery technologies. Founded by industry experts, our firm combines deep sector knowledge with strategic insights to help businesses navigate the complexities of sustainable development and technological advancement.



Mission: Our mission is to empower organizations to achieve their sustainability goals while enhancing operational efficiency and competitiveness. We strive to foster a cleaner, greener future through our consulting services that span the entire EV value chain, from battery manufacturing to energy storage systems.

Randheer Singh
CEO
Foresee Advisors
Pvt. Ltd.

Ex-Director, E-
Mobility, NITI
Aayog

Global Thought Leader in Electric Mobility and Climate Tech

With over 15 years of leadership experience in both corporate and public sectors, I have championed India's transition to sustainable mobility. During my tenure as Director of Electric Mobility at **NITI Aayog**, I led several high-impact initiatives, including **FAME II**, **ACC PLI**, and the **Shoonya Campaign**. These programs have been instrumental in shaping India's electric vehicle (EV) ecosystem and driving decarbonization in transport.

Key Expertise:

- **GTM, Technology recommendation, Factory setting up, Product positioning, pricing, New Product development, Policy and Standards:** Developed national policies on battery swapping, charging infrastructure, and EV financing. As part of the **ETD 51** committee, I contributed to critical EV infrastructure standards. **Technical Leadership:** Currently serving as the **Technical Chair for the World Utilities Congress, Abu Dhabi**, focusing on the impact of EVs on grid infrastructure and utilities.
- **Research and Publications:** Authored numerous technical reports on topics such as **battery recycling, advanced chemistry cells**, and **EV-grid integration**. These reports have been widely referenced in both industry and academia.



Recognitions and Accolades:

- Featured Several times at various forums including Business weeks in the **40 Under 40** list for contributions to the EV sector and business world.
- Keynote speaker at global platforms like **World EV Day, Financial Express EV Summit**, and more including Autocar professional



Published Insights:

Thought leader in EV technology, regularly published insights on topics such as recycling frameworks, battery supply chains, and sustainable mobility strategies. My work is frequently featured in industry journals and conferences

*** Refer [Annexure](#) for consolidated list of major contributions*

Few Snippets at various forums...

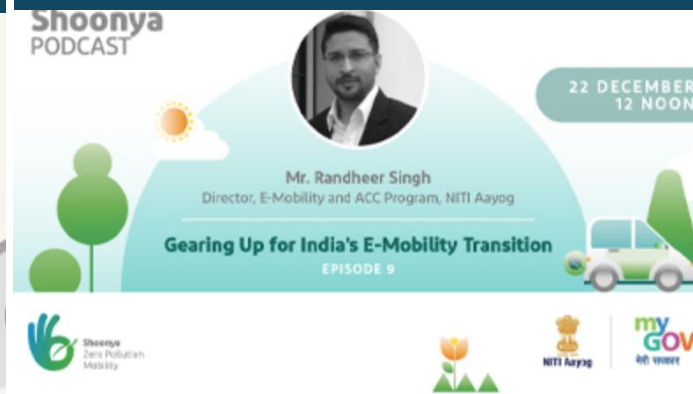
[Randheer Singh | LinkedIn](#)

Republic TVs: flagship live event in Delhi

Shift towards Green and Clean Vehicles in India is different from the rest of the world: Randheer Singh in Republic India Economic Summit 2021



Podcast: Prime Minister's portal



iCAT: Keynote speech



Bangkok: Keynote speech



Jury member
Prestigious Graham bell awards for EV



Mr Randheer Singh

CEO & FOUNDER, FORESEE ADVISORS; FORMER DIRECTOR, ELECTRIC MOBILITY & SENIOR TEAM MEMBER FOR ADVANCED CHEMISTRY CELLS PROGRAM, NITI AAYOG

autocar professional

Interview: Autocar Professional



Inaugurated Micelio's 1st Clean Mobility Summit with
Karnataka Industries Commissioner, Ms. Gunjan



Core Services offered...



EV Value Chain Consulting:

We offer comprehensive consulting services across the electric vehicle value chain, including market analysis, policy advisory, and strategic planning to help clients maximize their market potential.



Battery Development and Technology Solutions:

With a focus on lithium-ion battery technology, we assist clients in developing advanced battery solutions tailored for BEVs (2W, 3W, 4W LMV & HDV) and energy storage systems (ESS). Our expertise in rapid charging technologies positions us at the forefront of innovation.



Sustainability and Decarbonization Strategy:

Our team works closely with clients to develop and implement strategies that align with global sustainability goals, including carbon neutrality and pollution reduction initiatives. We leverage data-driven insights to propose effective solutions tailored to each client's unique challenges.



Market Research and Policy Analysis:

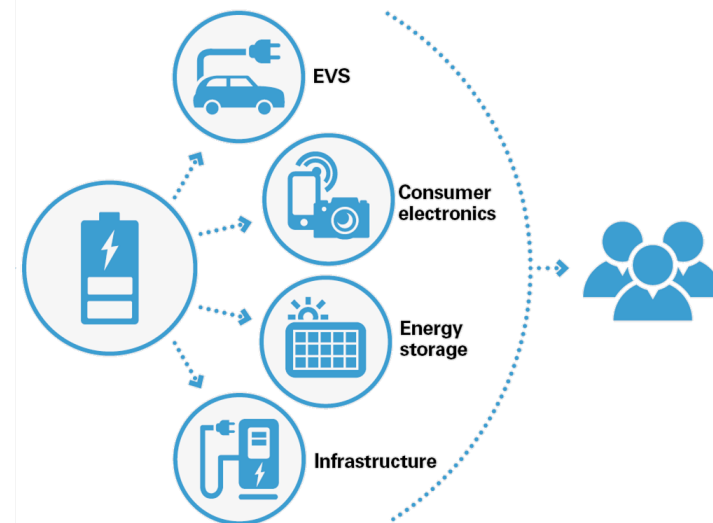
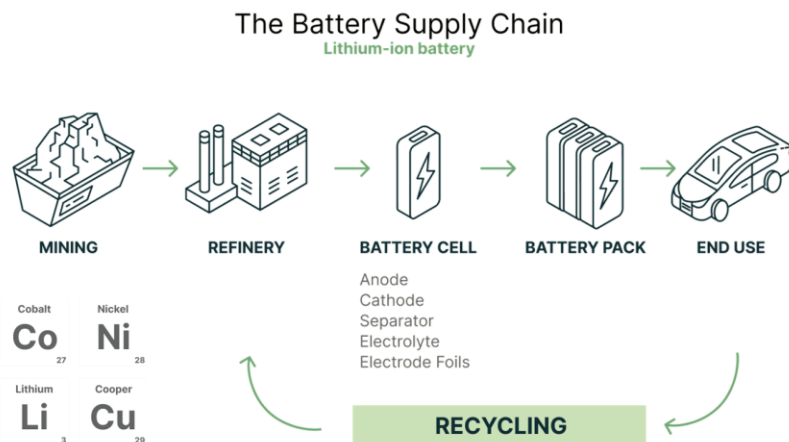
We provide in-depth market research and policy analysis, enabling clients to make informed decisions in an evolving regulatory landscape. Our reports are designed to offer actionable insights and strategic recommendations.



Training and Capacity Building:

We offer training programs aimed at enhancing knowledge and skills in battery technology, electric mobility, and sustainable practices, ensuring that our clients are equipped to lead in their respective fields.

Our Expertise



- *With around two decades of experience in the energy sector, our founder, Randheer Singh, has played a pivotal role in key initiatives such as the Accelerated Battery Development Program and various electric mobility frameworks. Our team's diverse expertise enables us to tackle complex challenges and deliver tailored solutions that drive sustainable growth.*
- *With a cumulative team experience of >50 years, the solutions are practical, unique and agile.*

Key Projects

1. EV Charging Solutions

Client: European OEM, India market entry, full-stack solution.



*As the electric vehicle (EV) market in India is projected to reach **\$150 billion by 2030**, the demand for robust charging infrastructure has never been greater. ForeSee Advisors has successfully partnered with a leading Polish EV charger manufacturer to address this critical need. Our key achievements include:*



Go-To-Market Strategy:

Developed a comprehensive GTM strategy that facilitated the launch of **50+ charging stations** across major metropolitan areas within the first year.



Contract Manufacturing:

Established local contract manufacturing partnerships, reducing production costs by **20%** and lead times by **30%**.



Product Development:

Tailored charger designs to withstand India's environmental conditions, resulting in a **15% increase in operational efficiency**.



ARAI Testing:

Coordinated testing at the Automotive Research Association of India (ARAI), achieving certification in **4 months**, significantly faster than industry norms.



Management Hiring:

Successfully recruited a high-performing management team, leading to a **40% increase in business development activities**.

2. Advanced R&D Center Development

Client: Japanese OEM with Indian partner, business case, site, team, gov. alignment

In collaboration with a Japanese technology firm, we established a joint venture with a major Indian conglomerate to create an advanced battery R&D center. Our contributions include:



Business Case Development:

Crafted a detailed business case predicting **\$500 million** in potential revenue over 10 years, driven by advancements in battery technology.



Location Identification: Conducted a comprehensive site analysis leading to the selection of a location that provides access to a talent pool of over **10,000 engineers**.



Management Hiring: Recruited a leadership team with a combined experience of **over 50 years** in battery technology and innovation.



Government Incentives: Secured **\$10 million** in government incentives, optimizing financial viability for the project.

3. Lithium-Ion Battery Recycling

Client: Two players (upstream & downstream), tech selection, strategy, execution.

*With the expected rise in EV batteries leading to a **10x increase in battery waste by 2030**, sustainable recycling practices are essential. Our work in lithium-ion battery recycling includes:*



Technology Identification:

Researched and identified advanced recycling technologies that can recover up to **95% of valuable materials** from used batteries.



Location Identification: Evaluated and identified two optimal locations for recycling facilities, reducing logistical costs by **25%**.



Capacity Assessment: Assessed recycling capacity requirements to align with projected battery waste, estimating the need for facilities capable of processing **100,000 tons of battery waste per year**.



Vendor Validation: Validated **5 key technology vendors**, ensuring the highest standards of quality and compliance.

4. Strategic Advisory for EV Market Entry

Client: Leading NBFC, new segment entry, tech pivot, spin-off, full roadmap.

ForeSee Advisors provided strategic advisory services for the largest financing company in Asia, facilitating their entry into the EV sector. Our impact included:



Business Case Development: Developed a detailed business case projecting a **30% return on investment (ROI)** within the first three years of operation.



Operations and Execution Strategy: Designed a comprehensive operations strategy that includes supply chain management, forecasting demand for **50,000 EV units** annually.



Mentorship Program: Provided one-on-one mentoring for the CEO over **12 months**, resulting in a **50% increase in stakeholder engagement** and strategic partnerships.

5. Heavy-Duty Vehicle Electrification

Client: Government, backed by top global agency, primary study, policy advisory.

In partnership with an international climate organization, we conducted an extensive study on the localization of powertrain and battery production for heavy-duty vehicles. Our findings included:



Market Forecasting: Estimated the market for electric heavy-duty vehicles will grow to **\$10 billion by 2025**, emphasizing the importance of local manufacturing.



Stakeholder Engagement: Engaged with over **100 stakeholders**, including manufacturers and suppliers, to assess the potential for localization up to Tier 3 levels.



Potential Impact Assessment: Identified that localizing battery production could reduce costs by **15-20%**, significantly enhancing competitiveness.

6. Battery Swapping

Client: South India's top two-wheeler OEM, end-to-end deployment.

For one of the largest ICE two-wheeler manufacturers, ForeSee Advisors developed a comprehensive battery swapping solution to support their entry into the electric market. Key achievements include:

End-to-End Solution Development: Designed a battery swapping system capable of servicing **1,000+ vehicles daily**, optimizing operational efficiency.

Vendor Development: Established relationships with **10 key vendors**, ensuring a steady supply chain for battery components and services.

Product Finalization and Testing: Oversaw product finalization and rigorous testing, achieving a **98% success rate** in performance metrics during pilot programs.

Deployment: Successfully launched the swapping stations in **3 major cities**, with plans for expansion based on initial performance data.

Why Choose ForeSee Advisors?



Industry Insight: Our team brings unparalleled knowledge of the clean energy landscape and a robust network of industry stakeholders.



Customized Solutions: We tailor our approach to meet specific business needs and objectives, ensuring optimal outcomes for our clients.



Proven Track Record: With a history of successful projects across multiple sectors, we are equipped to tackle complex challenges and deliver actionable solutions.

Contact Us: foresee@foreseeadvisors.in | +91 9789847743 | www.foreseeadvisors.in

Annexure

Reports

- *Lithium Batteries / Cells - Need for Advanced Chemistry Cell Energy Storage in India*
- Part 1 of 3: [Link](#)
- Part 2 of 3: [Link](#)
- Part 3 of 3: [Link](#)
- *Banking on Electric Vehicles in India*
- *Mobilising Electrical vehicle financing in India*
- *Recycling and reuse of Lithium-ion cells/batteries*
- *Electric 2W Penetration Modelling and forecast*
- *EV Charging handbook*

Articles

- TOI: *Addressing range anxiety to accelerate transition to green mobility in India*
- ET: *Plugging EV Charging infra holes*
- HT: *An implementation Roadmap for EV Charging infrastructure*
- Kurukshetra Journal - *Decarbonisation of Transport sector*
- Paper presentation: *Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam. Topic: Beyond Lithium - Battery storage system*
- Renewable Watch magazine- *EV Charging Space*
- Energetica India Magazine- *cross-sectoral cooperation to develop a battery storage ecosystem in India*
- CNN- *Battery Swapping, issues and fixes*
- Machine insider- *India's EV Revolution, E2W & E3W | Cover Story*
- ET Insights: *EV, Batteries and AI*
- Machine Insider: *India's EV Ecosystem*
- IndiaBusiness&Trade: *Potential for Sustainable mobility*
- ET Auto: *How to deal with challenges in eCVs*

Interviews

- Autocar Professional: *Interview in an anniversary edition, page 184 onwards, Dec 15, 2022*
- E-Mobility+ : [Link](#)
- ET Now Swadesh : [Link](#)
- CRISIL Ltd - *Localisation and adoption of EV Ecosystem*
- BW Autoworld: [Link](#)
- The Mint - *Battery Safety*
- CNBC TV18: [Link](#)
- Business Standard: *Tesla's impact on India's EV*
- Moho4industry: *Zero registration fees on Hybrid vehicles*

Media Discussions

- Sansad TV: [Link](#)
- Shoonya: [Link](#)
- Electric Vehicle Finance: [Link](#)
- Republic TV Economic Summit: [Link](#)
- Times Network - EV Value chain and transition to clean mobility (and impact on Grid): [Link](#)
- Commission for Air Quality Management and MoEFCC - *Interactive dialogues towards Clean air*
- Renewable Watch Magazine: *Battery Swapping potential in India*
- CNBC TV 18: [Link](#)
- ET Auto: [Link](#)
- Humans of EV: *Building a sustainable EV Ecosystem*
- Industry Samurai Awards and Conference 2024: [Link](#)
- Divergent Insights (Samurai Awards)-: [Link](#)
- Evolve Conclave: [Link](#)
- EMobilityPlus: [Link](#)

Podcasts

- [Link](#)
- Shoonya Podcast series of 10 episodes: [Link](#)
- Future of Mobility: [Link](#)
- The Hindu- InFocus *What can we expect from Tesla's entry in the Indian EV market*
- Humans of EV: *Building a sustainable EV Ecosystem*