



SUSTAINABLE INNOVATION AND GREEN R&D PRACTICES TRAINING COURSE

21 - 25 DEC 2026

MADRID

5900 € (PER PERSON)

REF: #RD2039_141069



COURSE INTRODUCTION / OVERVIEW:

This course provides a comprehensive framework for integrating sustainability into the core of innovation and research and development. In an era where environmental, social, and governance (ESG) factors are paramount, organizations must move beyond compliance to proactively embed green principles into their product and process development. This training explores the strategic implementation of sustainable innovation, transforming R&D departments into engines of long-term value creation and corporate responsibility. Drawing on pioneering concepts like those presented in "Cradle to Cradle: Remaking the Way We Make Things" by William McDonough and Michael Braungart, participants will learn to rethink design, material selection, and end-of-life management. The curriculum is designed to equip professionals with the tools to lead green R&D initiatives, fostering a culture of eco-design and circular economy thinking. BIG BEN Training Center has developed this program to bridge the gap between sustainability theory and practical R&D application, enabling businesses to innovate responsibly, reduce their carbon footprint, and gain a significant competitive advantage in a rapidly evolving global market. This journey covers everything from foundational principles to advanced strategies for measuring and communicating sustainability impact.

TARGET AUDIENCE / THIS TRAINING COURSE IS SUITABLE FOR:

- Research and Development (R&D) Managers and Team Leaders.
- Product Development Specialists and Engineers.
- Sustainability Officers and CSR Managers.
- Corporate Strategists and Business Development Executives.
- Innovation Managers.
- Environmental Compliance Officers.
- Supply Chain and Operations Managers.
- Marketing and Brand Managers involved in green product launches.
- Entrepreneurs and startup founders focused on cleantech.



TARGET SECTORS AND INDUSTRIES:

- Manufacturing and Industrial Production.
- Consumer Packaged Goods (CPG) and Retail.
- Technology and Electronics.
- Automotive and Transportation.
- Energy and Utilities.
- Construction and Real Estate.
- Pharmaceuticals and Biotechnology.
- Governmental bodies and public sector agencies.
- Agriculture and Food Production.

TARGET ORGANIZATIONS DEPARTMENTS:

- Research and Development (R&D).
- Sustainability and Corporate Social Responsibility (CSR).
- Product Management and Development.
- Innovation and Strategy.
- Operations and Manufacturing.
- Supply Chain and Procurement.
- Quality Assurance and Control.
- Marketing and Communications.
- Environmental, Health, and Safety (EHS).



COURSE OFFERINGS:

By the end of this course, the participants will have able to:

- Develop a strategic roadmap for integrating sustainability into the R&D process.
- Apply eco-design principles to create environmentally friendly products and services.
- Master the fundamentals of Life Cycle Assessment (LCA) to evaluate environmental impact.
- Integrate circular economy concepts into new business models and product designs.
- Identify and evaluate sustainable materials and green technologies for innovation.
- Establish key performance indicators (KPIs) to measure the success of green R&D initiatives.
- Align sustainable innovation projects with broader corporate ESG goals.
- Effectively communicate the value and impact of green innovations to stakeholders.
- Navigate the regulatory landscape related to environmental standards and reporting.
- Foster a culture of sustainable thinking within their innovation teams.

COURSE METHODOLOGY:

The training methodology at BIG BEN Training Center is designed to be immersive, practical, and highly interactive, ensuring that participants can immediately apply their learning. This course moves beyond traditional lectures to foster a dynamic learning environment. A cornerstone of our approach is the use of real-world case studies, where we will dissect the green R&D strategies of leading sustainable companies, analyzing both their successes and challenges. Participants will engage in collaborative workshops and team-based exercises, such as designing a product based on circular economy principles or developing a business case for a green technology investment. Interactive sessions, facilitated discussions, and brainstorming activities encourage the sharing of diverse perspectives and experiences. The program incorporates practical simulations that challenge participants to make strategic R&D decisions under realistic constraints. Continuous feedback is provided through peer reviews and expert guidance from the instructor, ensuring a deep and practical understanding of the concepts. This hands-on, problem-solving approach guarantees that attendees leave not just with knowledge, but with the confidence and skills to lead sustainable innovation within their own organizations.



COURSE AGENDA (COURSE UNITS):

UNIT ONE FOUNDATIONS OF SUSTAINABLE INNOVATION

- Introduction to sustainability and the triple bottom line.
- The strategic importance of green R&D in modern business.
- Understanding key frameworks: ESG, CSR, and the UN Sustainable Development Goals (SDGs).
- The business case for sustainable innovation: risk mitigation and value creation.
- Global trends and drivers in green technology and regulation.
- Defining eco-innovation and its different forms.
- The role of leadership in fostering a sustainable innovation culture.

UNIT TWO ECO-DESIGN AND GREEN PRODUCT DEVELOPMENT

- Principles of eco-design and design for environment (DfE).
- Introduction to Life Cycle Assessment (LCA) methodology.
- Conducting a simplified LCA for a product concept.
- Strategies for sustainable material selection and substitution.
- Reducing energy and resource consumption during the use phase.
- Designing for disassembly, repair, and recycling.
- Exploring concepts from "Cradle to Cradle" design philosophy.

UNIT THREE INTEGRATING CIRCULAR ECONOMY PRINCIPLES INTO R&D

- From linear to circular: understanding the circular economy model.
- Strategies for closing the loop: reuse, remanufacturing, and recycling.
- Developing product-as-a-service (PaaS) and other circular business models.
- Innovating to design out waste and pollution from the outset.
- The role of R&D in creating reverse logistics and take-back systems.
- Case studies of successful circular economy innovations.
- Challenges and opportunities in transitioning to a circular model.



UNIT FOUR GREEN TECHNOLOGY AND SUSTAINABLE OPERATIONS

- Overview of key green technologies: renewable energy, green chemistry, and water treatment.
- Implementing resource efficiency and clean production in manufacturing.
- The role of digitalization and IoT in enhancing sustainability.
- Developing a sustainable and transparent supply chain.
- Collaborating with suppliers to drive green innovation.
- Conducting a carbon footprint analysis for R&D operations.
- Assessing and adopting emerging clean technologies (cleantech).

UNIT FIVE STRATEGY, MEASUREMENT, AND COMMUNICATION OF GREEN INNOVATION

- Developing a green R&D and innovation roadmap.
- Setting meaningful sustainability goals and Key Performance Indicators (KPIs).
- Integrating sustainable innovation metrics into business reporting.
- Understanding standards and certifications (e.g., ISO 14001).
- Crafting a compelling narrative for green products (green marketing).
- Avoiding greenwashing: authentic communication with stakeholders.
- Final project: developing a pitch for a sustainable innovation initiative.

FAQ:

QUALIFICATIONS REQUIRED FOR REGISTERING TO THIS COURSE?

There are no requirements.

HOW LONG IS EACH DAILY SESSION, AND WHAT IS THE TOTAL NUMBER OF TRAINING HOURS FOR THE COURSE?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.



SOMETHING TO THINK ABOUT:

Beyond regulatory compliance and market demand, what is the core ethical responsibility of an R&D department in driving a truly sustainable future?

WHAT UNIQUE QUALITIES DOES THIS COURSE OFFER COMPARED TO OTHER COURSES?

This course distinguishes itself by adopting a deeply strategic and holistic perspective on sustainable innovation, moving far beyond a simple checklist of green tools or technologies. While other programs may focus narrowly on eco-design or compliance, this training integrates green R&D into the very fabric of corporate strategy and business model innovation. We emphasize the "why" behind the "how," empowering participants to become strategic leaders who can build a compelling business case for sustainability that resonates with executive leadership. The curriculum is uniquely structured to bridge the gap between high-level concepts like the circular economy and the practical, day-to-day realities of an R&D department. Through immersive case studies and hands-on workshops, participants learn not just to apply principles like Life Cycle Assessment, but to think critically about how these tools drive competitive advantage and long-term value. The focus is less on memorizing standards and more on cultivating an innovative mindset that sees sustainability as a powerful engine for growth, resilience, and market differentiation, ensuring graduates can lead transformative change within their organizations.