Trainer lesson plans

March 2026



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Index

Preamble 6
Lesson 0: Introduction to the OSCAR Course 7
0.1 Learning objectives 7
0.2 Lesson structure 7
Part 1: Welcome & Course Overview 7
0.3 Assessment 8
0.4 Key takeaways 8
0.5 Resources for trainers 8
Lesson 1: What is E-Waste? 9
1.1 Learning objectives 9
1.2 Lesson structure 9
Part 1: Definition and Scope of E-Waste 9
1.3 Assessment 10
1.4 Key takeaways 10
1.5 Resources for trainers 10
Lesson 2: The Environmental Impacts of E-Waste 11
2.1 Learning objectives 11
2.2 Lesson structure 11
Part 1: Chemical & Physical Pollutants in E-Waste 11
Part 2: Effects on Ecosystems & Biodiversity 11
Part 3: E-Waste & Climate Change 12
2.3 Assessment 12
2.4 Key takeaways 12
2.5 Resources for trainers 12
Lesson 3: Health Risks from E-Waste Mismanagement 13
3.1 Learning objectives 13
3.2 Lesson structure 13
Part 1: Toxic Chemicals in E-Waste 13
Part 2: Long-Term Health Consequences 13
Part 3: Safe Handling Practices 14
Part 4: Case Study – Sweden's Advanced Waste Management System 14
3.3 Assessment 14
3.4 Key takeaways 14
3.5 Resources for trainers 14
Lesson 4: Proper Disposal Methods for E-Waste 15
4.1 Learning objectives 15
4.2 Lesson structure 15
Part 1: Legal and Ethical Disposal 15
4.3 Assessment 16
4.4 Key takeaways 16
4.5 Resources for trainers 16

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Lesson 5: Sorting and Recycling Processes 17
5.1 Learning objectives 17
5.2 Lesson structure 17
Part 1: Global and Local E-Waste Policies 17
Part 2: E-Waste Management Guidelines 17
Part 3: Compliance and Enforcement 17
Part 4: Case Study – Envie Rennes 18
5.3 Assessment 18
5.4 Key takeaways 18
5.5 Resources for trainers 18
Lesson 6: Upcycling & reusing electronics 19
6.1 Learning objectives 19
6.2 Lesson structure 19
Part 1: What is Upcycling? 19
6.3 Assessment 20
6.4 Key takeaways 20
6.5 Resources for trainers 20
Lesson 7: Why Recycling Matters and How It Works 21
7.1 Learning objectives 21
7.2 Lesson structure 21
Part 1: The Benefits of Recycling 21
7.3 Assessment 22
7.4 Key takeaways 22
7.5 Resources for trainers 22
Lesson 8: Role of Manufacturers and Sustainable Design 23
8.1 Learning objectives 23
8.2 Lesson structure 23
Part 1: Manufacturers & E-Waste 23
8.3 Assessment 24
8.4 Key takeaways 24
8.5 Resources for trainers 25
Lesson 9: Conscious Consumption and Device Care 26
9.1 Learning objectives 26
9.2 Lesson structure 26
Part 1: Smart Purchasing Choices 26
9.3 Assessment 27
9.4 Key takeaways 27
9.5 Resources for trainers 28
Conclusion 28

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Preamble

This document has been developed as part of the OSCAR project (Fostering YOuth Behavioural Change Towards Sustainable Choices Concerning WAste of ElectRonic Devices). OSCAR is an Erasmus+ Cooperation Partnership, co-funded by the European Union[1].

It is intended to support youth workers, trainers, educators and facilitators in delivering the OSCAR learning programme on electronic waste (e-waste), the circular economy and sustainable consumption. The lesson plans provide a structured pedagogical framework for each learning module, offering sufficient flexibility to adapt to different learning environments, participant profiles and national contexts.

The OSCAR educational pathway uses non-formal learning methods, interactive activities, reflection exercises, case studies and digital learning resources to encourage young people aged 15 to 30 to acquire knowledge, think critically and change their behaviour. Particular attention is given to developing environmental awareness, responsible consumption habits, and active participation in the transition towards a more sustainable and circular society.

This document should be used alongside the OSCAR learning materials, which include training modules, case studies and factsheets, as well as the OSCAR Digital Training Hub. For each lesson, trainers will find learning objectives, suggested activities, assessment methods, key takeaways and additional resources to facilitate implementation.

Although the lesson plans offer a recommended structure, trainers are encouraged to customise the content, duration and activities according to their learners' needs, interests and prior knowledge. The ultimate objective is to increase awareness of e-waste challenges and empower young people to become informed consumers, responsible citizens and active contributors to sustainable development.

The OSCAR Consortium

March 2026

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Lesson 0: Introduction to the OSCAR Course

0.1 Learning objectives

- Understand the purpose and structure of the OSCAR course
- Recognize why e-waste matters as a global environmental and social issue
- Identify how e-waste connects to everyday life and sustainability
- Reflect on personal habits and readiness to act
- Feel motivated and empowered to participate actively throughout the course

0.2 Lesson structure

Part 1: Welcome & Course Overview

Content:

- What is OSCAR? Erasmus+ project details, goals, and philosophy
- Target audience and inclusivity
- Course structure: 9 modules blending theory, activities, and case studies

Activity:

- Icebreaker: 'What comes to mind when you hear e-waste?' (5 min discussion)

Resources:

- Slides 6–15 from Module 0; Video: The Story of Electronics (https://www.youtube.com/watch?v=sW_7i6T_H78&t=40s)

Part 2: Why E-Waste Matters

Content:

- E-waste is the fastest-growing waste stream globally (62 million tonnes in 2022)
- Only 22.3% formally recycled; consequences: toxic substances, pollution, resource loss

Activity:

- Reflection: 'What's in Your Drawer?' List unused electronics at home (3–5 min)

Resources:

- Slides 24–35; Global E-Waste Monitor 2024 report link

Part 3: Why Youth Awareness Matters

Content:

- Youth as major tech consumers and influencers

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- Awareness fosters responsibility and advocacy
- Circular economy and green jobs opportunities

Activity:

- Group brainstorm: 'What would motivate you to act on e-waste?' Share ideas (slide 45)

Resources:

- Slides 36–46; WHO report; iFixit repair guides

0.3 Assessment

- Quick quiz (5 questions): What is OSCAR? Why is e-waste a crisis? Global stats, health risks, youth actions
- Reflection journal: 'One action I will take after this session'

0.4 Key takeaways

- E-waste is a global crisis with environmental, social, and economic dimensions
- Youth play a critical role in driving change
- Awareness leads to responsible habits and participation in the circular economy

0.5Resources for trainers

- Slides: Module 0 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Videos: The Story of Electronics (slide 32)
- Reports: Global E-Waste Monitor 2024, WHO guidelines (slide 48)
- Tools: iFixit for repair activities (slide 48)

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Lesson 1: What is E-Waste?

1.1 Learning objectives

- Define e-waste and identify its components
- Understand global e-waste statistics and challenges
- Recognize environmental and economic impacts of improper e-waste management
- Analyze real-life case studies (e.g., Agbogbloshie, Ghana)
- Reflect on personal habits and propose solutions

1.2 Lesson structure

Part 1: Definition and Scope of E-Waste

Content:

- What is e-waste? Discarded electrical or electronic devices.
- EU WEEE Directive categories: Large appliances, IT equipment, consumer electronics, etc.
- Electrical vs. electronic devices.
- Why e-waste is a problem: hazardous materials, informal recycling, rapid tech turnover.

Activities:

- Icebreaker: List 5 devices you no longer use. Where are they now?
- Watch TED Talk: What's a Smartphone Made Of? (https://www.youtube.com/watch?v=vufLW4xOsS4&t=330s)

Part 2: Global E-Waste Statistics

Content:

- 62 million metric tons generated in 2022; only 22.3% recycled.
- Economic loss: $62 billion in unrecycled materials.
- Regional differences: Europe leads, Africa & Asia lag behind.

Activities:

- Reflection: Compare your country's recycling rate to global stats.
- Brainstorm: What local actions can youth take to improve recycling?

Part 3: Case Study – Agbogbloshie, Ghana

Content:

- Agbogbloshie: one of the world's largest e-waste dumping sites.
- Informal recycling practices: burning cables, breaking devices by hand.
- Health & environmental impact: toxic smoke, contaminated soil & water.

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Activities:

- Group project: Create a poster or short presentation proposing solutions for e-waste management in your country.
- Watch DW Documentary: Ghana – The World's Dumping Ground for E-Waste (https://www.youtube.com/watch?v=8Wlf1lv4TOo&t=1s)

1.3 Assessment

- Quick quiz (5 questions): Define e-waste, global stats, hazardous materials, recycling rate, Agbogbloshie significance.
- Reflection journal: One action I will take to reduce e-waste.

1.4 Key takeaways

- E-waste includes both working and non-working devices.
- Global e-waste is growing rapidly; recycling rates remain low.
- Informal recycling has severe health and environmental consequences.
- Youth can drive change through awareness, advocacy, and action.

1.5 Resources for trainers

- Slides: Module 1 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Videos: TED Talk (slides 13 & 17), International E-Waste Day (slide 25), DW Documentary (slide 35).
- Reports: Global E-Waste Monitor 2024, WHO guidelines (slide 41).
- Tools: quizzes, iFixit repair guides.

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Lesson 2: The Environmental Impacts of E-Waste

2.1 Learning objectives

- Identify chemical and physical pollutants in e-waste
- Understand the effects of e-waste on ecosystems and biodiversity
- Explain the link between e-waste and climate change
- Recognize detection and monitoring technologies for pollutants
- Reflect on solutions to reduce environmental harm caused by e-waste

2.2 Lesson structure

Part 1: Chemical & Physical Pollutants in E-Waste

Content:

- E-waste contains hazardous substances like lead, mercury, cadmium, and POPs.
- Physical pollutants include plastics and metals; plastics degrade into microplastics.
- Detection technologies: chemical analysis, spectroscopy, remote sensing, AI-based tools.

Activities:

- Group discussion: Why are heavy metals dangerous?
- Watch video: Heavy Metals in E-Waste (https://www.youtube.com/watch?v=ZMDi0U_HAaU)
- Reflection: List 3 pollutants you think are most harmful and why

Part 2: Effects on Ecosystems & Biodiversity

Content:

- Pollutants travel through air, water, and soil, contaminating ecosystems.
- Improper recycling releases up to 1000 chemical substances.
- Wildlife exposure: bioaccumulation in fish and birds, disrupting food chains.
- Case Study: India – informal dismantling sites and Bellandur Lake contamination.

Activities:

- Watch video: Impact of E-Waste on Ecosystems (https://www.youtube.com/watch?v=jczdDQDXWBo)
- Group project: Create a poster showing pollutant pathways and their impact on biodiversity

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Part 3: E-Waste & Climate Change

Content:

- Incineration releases greenhouse gases (CO_2, methane).
- Manufacturing electronics is energy-intensive; resource extraction increases emissions.
- Refrigerants in cooling systems are potent GHG sources.
- Recycling reduces emissions compared to raw material extraction.

Activities:

- Brainstorm: How does your tech use contribute to climate change?
- Watch video: E-Waste and Climate Change (https://www.youtube.com/watch?v=sTv4dyBc6bM&t=3s)

2.3 Assessment

- Quick quiz (5 questions): pollutants, biodiversity impact, recycling importance, climate link, solutions.
- Reflection journal: One action I will take to minimize e-waste pollution.

2.4 Key takeaways

- E-waste contains hazardous pollutants that harm soil, water, air, and living organisms.
- Improper disposal disrupts ecosystems and biodiversity.
- E-waste contributes to climate change through emissions and resource extraction.
- Recycling and responsible management are essential to reduce environmental harm.

2.5 Resources for trainers

Slides: Module 2 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.

- Videos: Heavy Metals (slide 13), POPs (slide 15), What is e-waste (slide 28).
- Reports: Global E-Waste Monitor, WHO, Greenpeace.
- Tools: quizzes, case studies.

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Lesson 3: Health Risks from E-Waste Mismanagement

3.1 Learning objectives

Identify and understand the toxic chemicals present in e-waste (lead, mercury, cadmium, flame retardants)

- Understand exposure pathways and vulnerable populations
- Explain long-term health consequences of e-waste mismanagement
- Learn safe handling practices to minimize health risks
- Analyze a real-world case study (Sweden's advanced waste management system)

3.2 Lesson structure

Part 1: Toxic Chemicals in E-Waste

Content:

- E-waste contains harmful substances like lead, mercury, cadmium, and brominated flame retardants.
- Mismanagement of e-waste can affect the air, water, and soil, which ultimately impacts human health.
- Exposure pathways: inhalation, ingestion, dermal contact.

Activities:

- Watch video: E-Waste Toxic Chemicals (https://www.youtube.com/watch?v=2F2DkBCY7EQ)
- Group discussion: How dangerous can exposure to toxins from e-waste be for human health?
- Reflection: Identify 3 everyday devices that may contain these toxins

Part 2: Long-Term Health Consequences

Content:

- E-waste exposure leads to long-lasting health problems, particularly for children and pregnant women.
- Respiratory damage from inhaling particulate matter and cadmium.
- Increased cancer risk and organ damage from chronic exposure.
- ILO and WHO estimate that millions of women and child labourers working in the informal recycling sector.

Activities:

- Case study review: Health impacts in Ghana (Agbogbloshie)

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- Watch video: Health of children in Ghana (https://www.youtube.com/watch?v=kHYyr65OViM)
- Group brainstorm: Practical solutions to reduce exposure

Part 3: Safe Handling Practices

Content:

- Preventive measures: PPE, safer recycling technologies, health monitoring.
- Global agreements: Basel Convention, WHO initiatives.
- National legislation and enforcement strategies.

Activities:

- Watch video on safe handling practices (https://www.youtube.com/watch?v=--kaBKCwbO8)
- Group activity: Discuss the key safety measures shown in the video and propose one additional safety measure for informal recycling sites.

Part 4: Case Study – Sweden's Advanced Waste Management System

Content:

- Waste-to-Energy technology reduces landfill waste and generates electricity.
- Strict sorting requirements and safe disposal of toxic materials.
- Results: 52% of waste converted to energy, 47% recycled, 1% landfilled.

3.3 Assessment

- Quick quiz (5 questions): toxins, exposure pathways, health impacts, safe practices, case study.
- Reflection journal: One action I will take to protect health from e-waste risks.

3.4 Key takeaways

- E-waste mismanagement poses severe health risks as it contains toxins dangerous to the human body.
- Exposure occurs through inhalation, ingestion, and skin contact.
- Long-term effects include neurological damage, respiratory disease, and cancer.
- Safe handling practices and strong regulations are essential.

3.5 Resources for trainers

- Slides: Module 3 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.

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- Videos: E-Waste Toxic Chemicals, Health of Children in Ghana (slide 27), Safe Handling Practices.
- Reports: WHO E-Waste and Child Health, PubMed studies (slide 49).
- Tools: case studies, quizzes.

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Lesson 4: Proper Disposal Methods for E-Waste

4.1 Learning objectives

- Identify what is the proper methods of disposal
- Clarify what the best practices and the differences between them
- Understand the possibilities of the consumer and its limitations

4.2 Lesson structure

Part 1: Legal and Ethical Disposal

Content:

- Historical origins of e-waste regulation and evolution of EU WEEE Directive.
- Extended Producer Responsibility (EPR) and its role in disposal systems.
- Ethical considerations beyond compliance: consumer responsibility and systemic change.

Activities:

- Watch video: European E-Waste Framework
- Group discussion: Why is ethics important in e-waste disposal?
- Reflection: Identify one ethical challenge in your country

Part 2: E-Waste Disposal Best Practices

Content:

- Overview of operational processes: collection, sorting, dismantling, processing.
- The 'R' hierarchy: Refuse, Reduce, Reuse, Repair, Recycle.
- Innovations and challenges in recycling technologies.

Activities:

- Brainstorm: Which 'R' is easiest for you to apply?
- Watch video: Innovations in recycling
- Group project: Design a poster promoting best disposal practices

Part 3: Role and Limits of Consumers

Content:

- Consumer responsibilities and behavioral determinants.
- Barriers to effective consumer action: convenience, awareness, infrastructure.
- Advocacy and systemic change: linking habits to policy.

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Activities:

- Watch video: Consumer influence on e-waste policies
- Group discussion: What limits your ability to recycle?
- Reflection: Suggest one policy change to improve consumer participation

Part 4: Case Study – French Eco-Organisms and Envie

Content:

- Overview of Ecosystem, Ecologic, and Soren roles in EPR.
- Social and Solidarity Economy (SSE) actors: Envie and Emmaüs.
- Governance challenges: transparency, inclusivity, and reuse targets.

Activities:

- Watch video: French E-Waste Management System
- Group activity: Compare EPR systems in two countries
- Quiz: Test your knowledge on eco-organisms

4.3 Assessment

- Quick quiz (5 questions): WEEE Directive, EPR, best practices, consumer role, case study.
- Reflection journal: One action I will take to improve e-waste disposal.

4.4 Key takeaways

- Proper disposal minimizes environmental harm and supports circular economy.
- EPR shifts responsibility to producers but requires strong governance.
- Consumer action matters but systemic change is essential.
- Case studies show the importance of inclusive and transparent systems.

4.5 Resources for trainers

- Slides: Module 4 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Reports: EU WEEE Directive, Basel Convention.
- Tools: Case studies, quizzes.

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Lesson 5: Sorting and Recycling Processes

5.1 Learning objectives

- Understand global and local e-waste policies (Basel Convention, EU WEEE Directive)
- Identify management guidelines and economic models for e-waste
- Recognize compliance and enforcement mechanisms
- Analyze real-world case studies (e.g., Envie Rennes)
- Reflect on systemic changes needed for sustainable e-waste governance

5.2 Lesson structure

Part 1: Global and Local E-Waste Policies

Content:

- Basel Convention: Controls transboundary movement of hazardous waste.
- EU WEEE Directive: Framework for collection, recycling, and disposal.
- Critical Raw Materials Act: Targets 15% recycling of critical materials by 2030.

Activities:

- Watch video: Basel Convention overview
- Group discussion: Why global treaties matter for e-waste?
- Reflection: Compare your country's policy with EU framework

Part 2: E-Waste Management Guidelines

Content:

- Economic models: Circular economy vs. profit-driven approaches.
- Role of public authorities: Regulation, subsidies, awareness campaigns.
- Social and Solidarity Economy (SSE): Inclusive models for reuse and recycling.

Activities:

- Brainstorm: Which economic model is most sustainable?
- Watch video: Circular economy in practice
- Group project: Design a local e-waste management plan

Part 3: Compliance and Enforcement

Content:

- Enforcement mechanisms: Inspections, sanctions, and incentives.
- Challenges: Limited resources, corruption, informal recycling.
- Debate: Stricter penalties vs. education and incentives.

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Activities:

- Watch video: Enforcement challenges in e-waste management
- Group discussion: How to improve compliance?
- Reflection: Suggest one policy improvement

Part 4: Case Study – Envie Rennes

Content:

- Envie: Social enterprise combining recycling with social inclusion.
- Impact: Employment for marginalized groups, affordable electronics.
- Lessons: Scaling social economy models for sustainability.

Activities:

- Watch video: Envie's approach to e-waste
- Group activity: Compare SSE models in two countries
- Quiz: Test your knowledge on case study

5.3 Assessment

- Quick quiz (5 questions): Basel Convention, WEEE Directive, economic models, enforcement, case study.
- Reflection journal: One action I will take to support better e-waste governance.

5.4 Key takeaways

- Global treaties and EU directives shape e-waste governance.
- Economic models influence sustainability and inclusivity.
- Enforcement is critical but faces systemic challenges.
- Social economy models like Envie offer scalable solutions.

5.5 Resources for trainers

- Slides: Module 5 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Reports: EU WEEE Directive, Critical Raw Materials Act.
- Tools: Case studies, quizzes,

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Lesson 6: Upcycling & reusing electronics

6.1 Learning objectives

- Understand the concept of upcycling and how its connected to circular economy.
- Learn how to repair and reuse old electronic devices by mastering basic repair tricks rather than discarding them.
- Explore repurposing and upcycling of e-waste in your own creative projects.

6.2 Lesson structure

Part 1: What is Upcycling?

Content:

- Define upcycling and distinguish it from recycling.
- Explain how upcycling adds value and reduces waste.
- Link upcycling to circular economy principles.

Activities:

- Watch video: Recycling vs Upcycling (https://youtu.be/v8JJCbfIlws)
- Group discussion: Why is upcycling important for sustainability?
- Reflection: Share one idea for upcycling an old device

Part 2: DIY Repair and Reuse

Content:

- Principles of repairability: modularity, accessibility, affordability.
- Environmental benefits: 92% less waste and 89% fewer GHG emissions compared to replacement.
- Financial benefits: repair costs vs buying new devices.

Activities:

- Watch video: Basic DIY repair skills (https://youtu.be/SEZyUzt8xys)
- Hands-on: Practice simple repairs using iFixit guides
- Safety checklist review before repair

Part 3: Creative Upcycling Projects

Content:

- Examples: Von Wong's art installations, DIY lamps, robot sculptures.
- Benefits: creativity, awareness, and reducing e-waste.

Activities:

- Watch video: Von Wong's e-waste art project (https://youtu.be/HXk2wcueD6I)

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- Group challenge: Design and present an upcycling prototype
- Brainstorm: How can art influence sustainability?

Part 4: Case Study – Repair Café

Content:

- History: Founded in Amsterdam, now 3,610 cafés worldwide.
- Purpose: Community-driven repair, skill-sharing, and waste reduction.
- Impact: Promotes repair culture and reduces e-waste globally.

Activities:

- Watch video: Repair Café movement (https://youtu.be/Ur2DH7wG6BY)
- Group discussion: How can similar initiatives be started locally?
- Quiz: Test your knowledge on repair and upcycling
- Call to action: Repair, Snap & Share

6.3 Assessment

- Quick quiz (5 questions): upcycling, recycling, circular economy, repairability, case study.
- Reflection journal: One action I will take to promote repair and upcycling.

6.4 Key takeaways

- Upcycling adds value and reduces waste.
- Repair and reuse save money and protect the environment.
- Creative projects raise awareness and inspire action.
- Community initiatives like Repair Café foster sustainable habits.

6.5 Resources for trainers

- Slides: Module 6 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Videos: Art with E-Waste (slide 12), DIY repair (slide 25), Von Wong projects (slides 32 – 35), Repair Café (slide 39).
- Reports: Circular economy guides, iFixit repair manuals.
- Tools: quizzes, safety checklists.

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Lesson 7: Why Recycling Matters and How It Works

7.1 Learning objectives

- Explain why recycling e-waste is essential for environmental and economic sustainability
- Understand the recycling process and its stages
- Identify local recycling options and best practices
- Analyze a real-world case study (Australia's National Scheme)
- Encourage youth participation in recycling initiatives

7.2 Lesson structure

Part 1: The Benefits of Recycling

Content:

- Recycling conserves resources, prevents pollution, and reduces landfill waste.
- E-waste contains valuable materials like gold, silver, and copper.
- Recycling one million laptops saves enough energy to power 3,500 homes for a year.

Activities:

- Group discussion: Why is recycling better than disposal?
- Reflection: Share one reason why recycling matters to you

Part 2: Recycling Processes

Content:

- Recycling steps: Collection & transportation, sorting & dismantling, material recovery and safe disposal
- Proper and improper e-waste management
- Technologies: Magnetic separation, shredding, hydro- and pyro-metallurgy.
- Risks of improper e-waste management: toxic leaks, air and water pollution.

Activities:

- Watch video: Electronic waste & Circular Economy
- Group activity: Map the recycling journey of a single piece of plastic waste
- Quiz: Identify key information about recycling

Part 3: Local Recycling Options

Content:

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- Examples: France (DEEE system), Malta (civic amenity sites), Greece (EOAN bins), Spain (SIGs), Sweden (El-Kretsen).
- Importance of citizen participation and awareness campaigns.

Activities:

- Research: Find your local e-waste recycling options
- Group discussion: How can youth improve recycling rates?
- Create a poster promoting local recycling initiatives

Part 4: Case Study – Australia's National Scheme

Content:

- NTCRS: Launched in 2011 under the Product Stewardship Act.
- Over 230,000 tons of e-waste collected and processed by 2023.
- Impact & Benefits: Environmental, social and economic

Activities:

- Group discussion: Could similar schemes work in your country?
- Quiz: Key facts about NTCRS

7.3 Assessment

- Quick quiz (5 questions): Identify key information about recycling
- Reflection journal: One action I will take to promote e-waste recycling.

7.4 Key takeaways

- Recycling e-waste conserves resources and recovers valuable materials.
- Proper recycling processes prevent pollution and protect health.
- Local and national schemes make recycling accessible and impactful.
- Youth engagement is key to improving recycling rates globally.

7.5 Resources for trainers

- Slides: Module 7 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Video: Electronic Waste and the Circular Economy (slide 25)
- Reports (slide 40): Waste Management Outlook for Latin America and the Caribbean, Economic benefits of recycling e-waste, The complete e-waste recycling process, E-waste recycling program.
- Tools: quizzes, case study, group activities.

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Lesson 8: Role of Manufacturers and Sustainable Design

8.1 Learning objectives

- Understand manufacturers' role in e-waste reduction
- Explain Extended Producer Responsibility (EPR) and its impact
- Identify sustainable manufacturing practices and eco-design principles
- Explore innovations in e-waste solutions (AI, robotics, recycling chemistry)
- Analyze a real-world case study (Fairphone)

8.2 Lesson structure

Part 1: Manufacturers & E-Waste

Content:

- Manufacturers influence product design, repairability, and recyclability.
- 80% of a product's environmental impact is determined at the design stage.
- Poor design leads to premature disposal and increased e-waste.

Activities:

- Watch video: How manufacturers can reduce e-waste
- Group discussion: Why does design matter for sustainability?
- Reflection: Share one example of a poorly designed product

Part 2: Extended Producer Responsibility

Content:

- EPR makes manufacturers responsible for the entire lifecycle of products.
- EU WEEE Directive and Circular Economy Action Plan promote EPR.
- Benefits: boosts recycling, drives eco-design, supports circular economy.

Activities:

- Watch video: EPR in action
- Group discussion: How can EPR improve recycling rates?
- Quiz: Key facts about EPR

Part 3: Sustainable Manufacturing Practices

Content:

- Eco-design principles: modularity, repairability, recyclability.
- Use of circular materials: recycled plastics, bioplastics, Fairtrade metals.

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- Lifecycle assessments to measure environmental impact.

Activities:
- Watch video: Eco-design and circular economy
- Group project: Design a modular smartphone concept
- Reflection: How does repairability reduce e-waste?

Part 4: Innovation in E-Waste Solutions

Content:
- Robotics and AI for automated disassembly and sorting.
- Advanced recycling chemistry for PCBs.
- Blockchain for traceability and compliance.

Activities:
- Watch video: Robotics in recycling
- Group discussion: Which innovation is most impactful?
- Quiz: Emerging technologies in e-waste recycling

Part 5: Case Study – Fairphone

Content:
- Fairphone designs modular, repairable smartphones using ethical materials.
- Impact: Devices last 5–7 years, reduce CO_2 emissions by ~30%, promote transparency.

Activities:
- Watch video: Fairphone sustainability journey
- Group discussion: How can mainstream brands adopt similar practices?
- Reflection: Share one lesson learned from Fairphone

8.3 Assessment

- Quick quiz (5 questions): design impact, EPR, eco-design, innovations, case study.
- Reflection journal: One action I will take to support sustainable electronics.

8.4 Key takeaways

- Manufacturers play a critical role in reducing e-waste through design and responsibility.
- EPR drives eco-design and recycling systems globally.
- Sustainable practices and innovations support circular economy goals.
- Fairphone demonstrates that ethical, modular design is possible and impactful.

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8.5 Resources for trainers

- Slides: Module 8 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Videos: EPR, eco-design, robotics in recycling, Fairphone case study.
- Reports: Ellen MacArthur Foundation, EU WEEE Directive, Fairphone Impact Report.
- Tools: Quizzes, design challenge templates, case study briefs.

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Lesson 9: Conscious Consumption and Device Care

9.1 Learning objectives

- Understand the concept of conscious purchasing and planned obsolescence
- Learn practical tips for product care to extend device lifespan
- Explore sharing and donating as sustainable practices
- Analyze a real-world case study (Fliptech) to inspire youth action
- Develop advocacy skills to promote responsible habits

9.2 Lesson structure

Part 1: Smart Purchasing Choices

Content:

- Understand real needs vs perceived needs created by marketing.
- Planned obsolescence and its environmental impact.
- Hidden costs of electronics beyond the price tag (social and ecological).

Activities:

- Watch video: The Story of Electronics (https://www.youtube.com/watch?v=sW_7i6T_H78)
- Group discussion: What is one device you regret buying and why?
- Reflection: List 3 things you'll use a new device for and 3 alternatives you already own

Part 2: Importance of Product Care

Content:

- Define care and its role in extending device lifespan.
- Environmental benefits: reducing CO_2 emissions and resource use
- Practical tips: cleaning, updates, battery management, safe charging.

Activities:

- Watch video: How to make your device last longer (https://www.youtube.com/watch?v=odPyr6THOgk&t=6s)
- Brainstorm: Share best tips for device care on a collaborative wall (Canva)
- Hands-on: Perform a quick maintenance check on your phone or laptop

Part 3: Caring through Sharing and Donating

Content:

- Emotional and practical barriers to letting go of devices.

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- Benefits of sharing and donating electronics.
- Examples: Libraries of Things, Repair Cafés, donation drives.

Activities:
- Watch video: How donation transforms lives (https://youtu.be/Xmj5zm63l20)
- Group discussion: What items could you share or donate today?
- Create a poster promoting tech donation in your community

Part 4: Case Study – Fliptech

Content:
- Story of Austin Turpin: From landfill visit to founding Fliptech.
- Impact: Diverting e-waste from landfills, reducing CO_2 emissions, creating jobs.
- Lessons: Small actions can lead to big change.

Activities:
- Watch video: Fliptech story (https://www.fliptech.com.au/home)
- Group discussion: How can youth replicate similar initiatives?
- Reflection: Write one idea for an e-waste action project

Part 5: Advocating for Change

Content:
- Youth as changemakers: campaigns, social media, and advocacy.
- Designing impactful awareness campaigns.
- Linking personal habits to systemic change.

Activities:
- Class activity: Design and pitch a youth campaign for responsible tech habits
- Group reflection: What motivates youth to change habits?
- Share campaign ideas on social media with #RepairRevolution

9.3 Assessment

- Quick quiz (5 questions): planned obsolescence, care tips, sharing benefits, case study, advocacy.
- Reflection journal: One action I will take to promote responsible tech habits.

9.4 Key takeaways

- Conscious purchasing reduces waste and saves money.
- Caring for devices extends lifespan and lowers environmental impact.
- Sharing and donating electronics fosters community and sustainability.
- Youth-led initiatives and advocacy can drive systemic change.

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9.5 Resources for trainers

- Slides: Module 9 PowerPoint. Trainer resources are embedded directly within the slides at relevant moments and compiled in a dedicated resources section at the end of the presentation.
- Videos: How to care for your device (slide 26), device care tips (slide 29), What is minimalism (slide 36), How donation transform lives (slide 42)
- Reports: Planned obsolescence studies, circular economy guides.
- Tools: in-class activity step by step guide, quizzes.

Conclusion

The OSCAR lesson plans provide a practical and adaptable framework to support youth workers, trainers, educators, and facilitators in delivering engaging learning experiences on e-waste, circular economy principles, and sustainable consumption.

Across the ten modules, participants progressively explore the environmental, social, economic, and health dimensions of electronic waste while developing the knowledge, skills, and attitudes required to make more sustainable choices. Through a combination of non-formal learning methods, discussions, case studies, digital tools, hands-on activities, and reflection exercises, the OSCAR programme aims to transform awareness into meaningful action.

The role of trainers is central to this process. By creating inclusive, participatory, and learner-centred environments, trainers can empower young people not only to understand the challenges associated with e-waste but also to become active contributors to solutions within their communities. Whether through responsible consumption, repair and reuse initiatives, recycling practices, advocacy campaigns, or future green careers, young people have the potential to drive positive environmental change.

The OSCAR Consortium encourages trainers to adapt these lesson plans to their local contexts, draw upon the additional resources available through the OSCAR Digital Training Hub, and continue fostering dialogue, creativity, and critical thinking among participants. Sustainable change begins with informed choices, and every action taken to extend the life of electronic devices, reduce waste, and promote circular practices contributes to a more resilient and sustainable future.

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