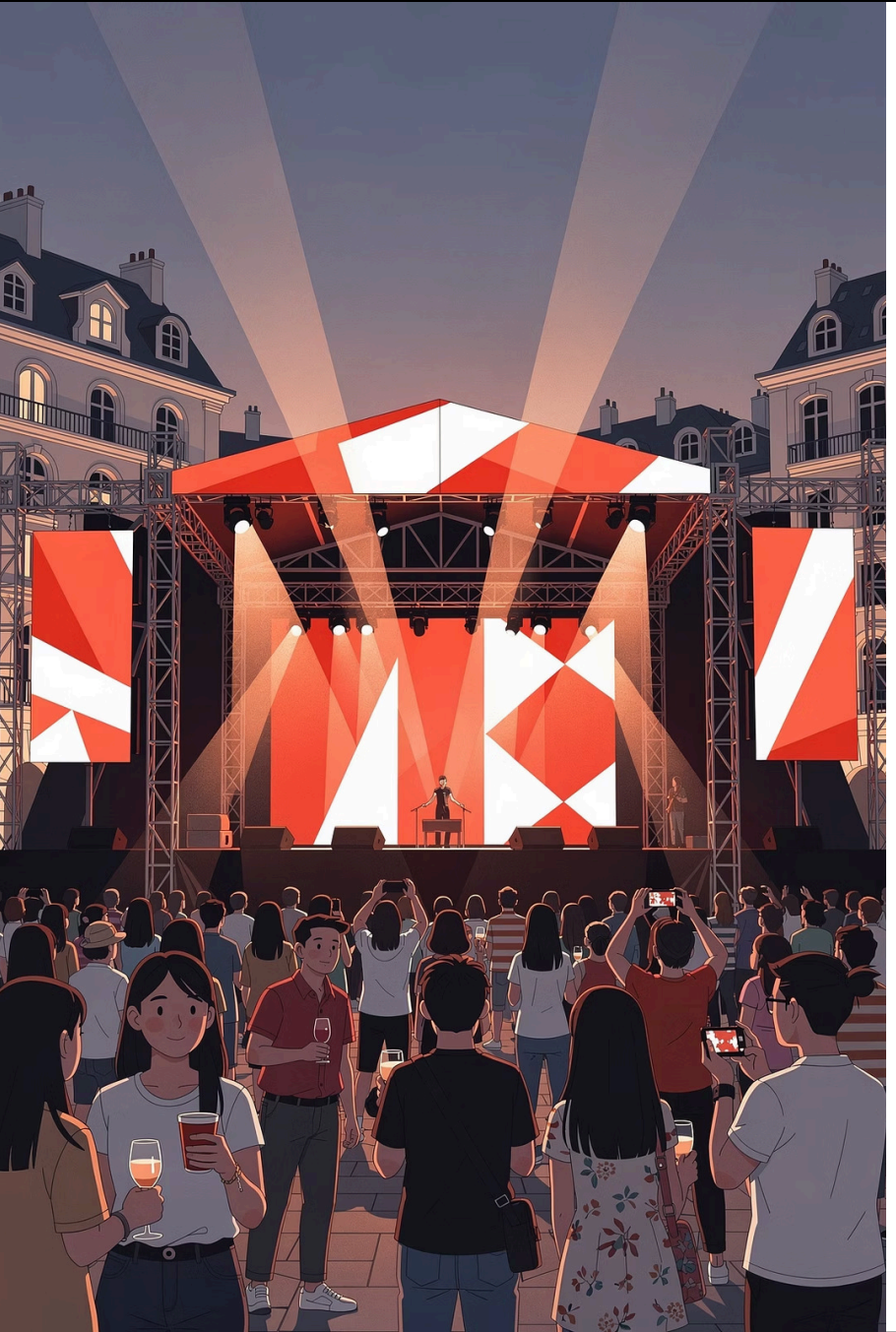

TRAINING COURSE ON SUSTAINABLE & INCLUSIVE CULTURAL EVENTS

MODULE 3

Environmental Sustainability in Practice: Redesigning Core Systems

KULTINCLUSION PROJECT PROJECT NUMBER 2023-RO01-KA220-ADU-000156918

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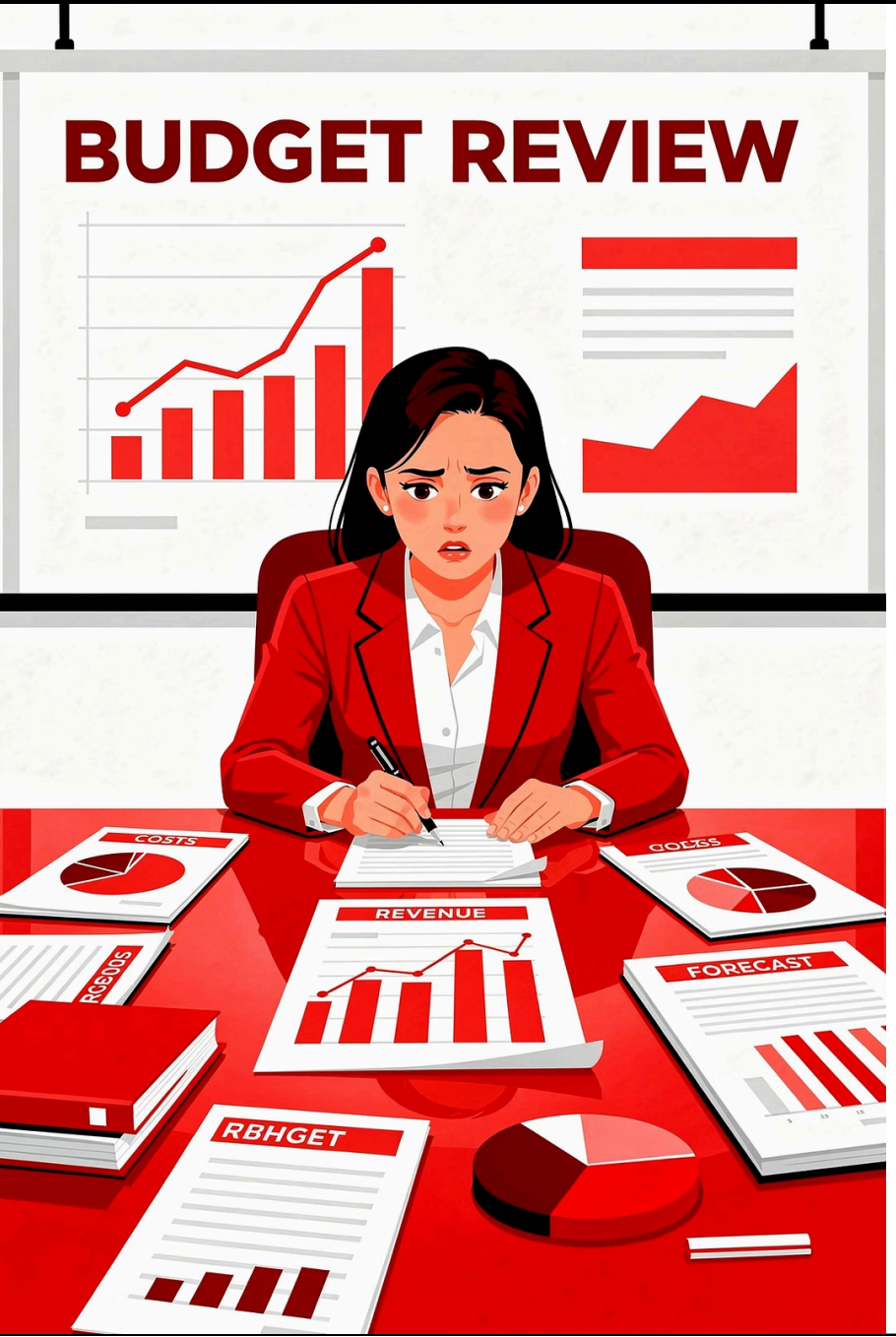

1. Opening Scenario – The Budget Meeting

After completing her diagnosis, Anna discovers:

Diagnosis Scores

1
Energy score

2
Waste score

0
Transport score

1
Water score

She feels overwhelmed. She says:

> "We don't have the budget for carbon neutrality."

> "We are too small to calculate emissions."

> "We depend on suppliers — we can't control everything."

But **sustainability is not about perfection**. It is about **redesigning core systems**.

This module focuses on three pillars:

1. **Measuring carbon impact**
2. **Redesigning infrastructure decisions**
3. **Embedding sustainability into supplier contracts**

2. Understanding Carbon Impact in Events

Every event produces emissions from:

Energy use

Electricity, generators

Transport

Audience, artists, logistics

Materials & infrastructure

Food and catering

Waste management

> The European Climate Law establishes climate neutrality by 2050 as a binding objective. Even small cultural events operate within this transition.

But how can a small organiser estimate carbon impact realistically?

https://climate.ec.europa.eu/eu-action/european-climate-law_en

3. Simple Carbon Estimation Logic for Small Events

You do not need complex software. Start with three main categories:

1

A. Energy Emissions

Diesel generators or grid electricity — calculate using emission factors.

2

B. Audience Transport Emissions

Often the largest hidden impact — estimate by mode of travel and distance.

3

C. Food & Catering

Meat-based menus, imported products, and single-use packaging are high-impact factors.

A. Energy Emissions

If using diesel generators:

1 litre diesel ≈ **2.68 kg CO_2**

Example:

180 litres diesel × 2.68 = **482 kg CO_2**

If using grid electricity:

Use national emission factor (varies by country).

Example average EU factor: **~0.23 kg CO_2 per kWh** (illustrative).

Formula: kWh consumed × emission factor = kg CO_2

If you do not know kWh: Ask supplier or venue.

B. Audience Transport Emissions

Transport is often the largest hidden impact.

Example inputs:

- 800 visitors per day
- 60% arrive by car
- Average 20 km round trip
- Average car emission: 0.17 kg CO_2 per km

Calculation:

800 × 60% = **480 car users**

480 × 20 km = **9,600 km**

9,600 × 0.17 = **1,632 kg CO_2 per day**

> This may exceed generator emissions. **Transport strategy matters.**

C. Food & Catering

High-impact factors:

- Meat-based menus
- Imported products
- Single-use packaging

> Replacing **50% beef dishes with vegetarian options** can reduce catering emissions significantly.

This aligns with the EU Farm to Fork Strategy:

https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en

4. What Carbon Estimation Teaches

Often organisers discover:

Transport > Energy	**Energy > Waste**	**Waste > Water**

Carbon logic helps prioritise.

Without measurement:

Decisions are **symbolic**.

With estimation:

Decisions become **strategic**.

5. Operational Redesign – Infrastructure Decisions

Instead of asking: *"How do we reduce everything?"*
Ask: **"Which system redesign creates the largest reduction?"**

Energy

- Switch generator → grid
- Install temporary solar for low-load areas
- Use battery storage for silent zones

Transport

- Offer discount for public transport ticket holders
- Provide shuttle from train station
- Communicate carpool incentives

Waste

- Deposit cup system
- Eliminate single-use backstage catering
- Supplier packaging agreements

Water

- Dry toilets
- Low-flow taps
- No bottled water backstage

6. Embedding Sustainability into Supplier Contracts

> This is where real structural change happens. Sustainability must move from **recommendation** to **requirement**.

Below are sample clauses you can adapt.

Recommendation → **Requirement** → **Structural Change**

The following slides present four example contract clauses covering energy, catering, infrastructure, and waste management.

Sample Contract Clauses (1 & 2)

1

Example Clause 1 – Energy Supplier

"The supplier commits to providing energy solutions prioritising renewable sources where technically feasible. Diesel generators shall only be used where no alternative connection is available."

2

Example Clause 2 – Catering Provider

"The catering provider commits to:

- Offering at least 40% vegetarian or plant-based options
- Prioritising locally sourced products
- Avoiding single-use plastic packaging
- Providing transparent ingredient lists for allergy and dietary inclusion"

Sample Contract Clauses (3 & 4)

1	2
Example Clause 3 – Infrastructure Provider "All temporary structures and materials must prioritise reusable or modular systems. Single-use decorative materials are discouraged unless recyclable."	**Example Clause 4 – Waste Management** "The waste contractor must provide separated waste streams and report estimated volumes of each category post-event."

This approach reflects the circular economy objectives within the European Green Deal:

https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/circular-economy-action-plan_en

STRUCTURED CASE STUDY

Case Study – From Generator Dependency to Structural Redesign

Context

Anna's festival (3 days, 2,400 total visitors, €28,000 budget) relies on:

- Diesel generator (180 litres total)
- No transport incentives
- Standard catering contract
- No sustainability clauses

After Module 2 diagnosis, she identifies:

0

Transport score

1

Energy score

She decides to **focus on energy first**.

CASE STUDY – STEP 1

Step 1 – Carbon Snapshot

Diesel use:

180 litres × 2.68 kg CO_2 = **482 kg CO_2**

Transport estimate:

- 800 visitors/day
- 60% by car
- 20 km round trip
- 0.17 kg CO_2/km

= **1,632 kg CO_2 per day**
= **4,896 kg CO_2 over 3 days**

> **Transport clearly larger.**

CASE STUDY – STEP 2

Step 2 – Redesign Decision

Energy

- Explores grid connection with municipality
- Grid cost: €900
- Generator cost: €1,200 rental + diesel
- Noise reduction benefit
- Lower emissions

Transport

- Introduces shuttle from train station
- Public transport ticket discount
- Communication campaign encouraging carpool

CASE STUDY – STEP 3

Step 3 – Contractual Integration & Outcome

Catering contract updated:

- Minimum 40% vegetarian options
- No single-use plastic packaging
- Ingredient transparency

Waste contract updated:

- Separated streams mandatory
- Post-event waste report required

Outcome (Next Edition)

- Generator eliminated
- 12% reduction in car arrivals
- 35% vegetarian meals sold
- Waste separation improved

Most importantly: Sustainability moved from **symbolic to structural**.

7. The Cost Myth

Many organisers assume sustainability increases cost. But often:

Reusable cup deposit

→ cost neutral

Grid energy

→ cheaper than fuel

Local suppliers

→ reduced transport cost

Reduced waste

→ lower disposal fees

Carbon estimation often reveals **inefficiencies that already cost money**.

Guided Practical Exercise

8. Guided Practical Exercise

1 Step 1 – Estimate Rough Carbon Sources

Use simple logic for:

- Energy
- Transport
- Catering

Identify which is largest.

2 Step 2 – Select One System for Redesign

Choose one area where:

- Emissions are high
- Redesign is feasible
- Budget impact manageable

3 Step 3 – Draft One Supplier Clause

Write one sustainability clause you can realistically include next year.

Keep it short. Keep it enforceable.

9. From Symbolic to Structural Sustainability

Symbolic sustainability:

- Recycling bins
- Green messaging
- Social media statements

Structural sustainability:

- Contract clauses
- Energy sourcing decisions
- Menu redesign
- Transport incentives
- Measurement and reporting

Structural change is slower. **But it lasts.**

CLOSING REFLECTION

10. Closing Reflection

Carbon is not an abstract global number. It is embedded in:

- Your generator
- Your catering contract
- Your transport communication
- Your supplier agreements

> Environmental sustainability in events is not about being perfect. It is about **redesigning systems where you have leverage**.

In **Module 4**, we will apply the same operational depth to **inclusive event design**.