Safe & Sustainable Theatre & Performing Arts Practice
Empowering Wood Buffalo Artists as Environmental Changemakers

Arts Council Wood Buffalo (ACWB) & SCALE-LeSAUT 2026

1. Why Sustainability in Theatre Looks Different in the North

Theatre in northern and remote regions operates under distinct constraints:

- Long heating seasons
- High venue energy loads
- Extended touring distances
- Air travel dependency
- Limited freight consolidation
- Temporary crews and seasonal labour
- Limited recycling and hazardous waste infrastructure
- Wildfire smoke interruptions

Sustainability here cannot rely on urban models.

It must address:

- Energy-intensive buildings
- Touring emissions
- Set construction materials
- Costume production and cleaning
- Audience transportation
- Temporary production waste

Theatre is collaborative and material-heavy.
Every production decision shapes environmental impact.

Sustainable practice is not about eliminating production.
It is about reducing avoidable harm and increasing intentionality.

2. Production Planning as Climate Planning

The largest environmental impacts in theatre often occur before rehearsals begin.

Early decisions determine:

- Set scale and materials
- Touring footprint
- Lighting design intensity
- Freight weight
- Build-and-strike waste
- Reusability

Embed Sustainability at Concept Stage

Ask:

- Can the set be modular, lightweight, or reused?
- Is the scale proportionate to audience size?
- Can lighting design reduce fixture count?
- Can materials be locally sourced?
- Can touring routes be consolidated?

A sustainability lens applied during design saves far more impact than post-production mitigation.

Further reading
• Theatre Green Book – Sustainable Productions Standard

3. Energy Use in Venues & Rehearsal Spaces

In northern regions, heating dominates energy use.

Key impact areas:

- Stage lighting
- HVAC systems
- Rehearsal space heating
- Back-of-house equipment
- Standby energy loads

Practical Energy Reduction Strategies

- Convert to LED stage lighting where feasible
- Power down ghost loads between rehearsals
- Limit unnecessary rehearsal lighting
- Program HVAC only during occupancy
- Use zoned heating where possible
- Close unused areas during winter

Resource
• Natural Resources Canada – Energy Efficiency for Small Business

Further reading
• Gallery Climate Coalition – Our Tools (Carbon Calculator)

LED retrofits significantly reduce electrical demand and heat output.

Lighting design becomes climate design.

4. Set & Scenic Construction

Set construction often represents one of the highest material impacts in theatre.

Common issues:

- Single-use builds
- Composite materials difficult to recycle
- Solvent-based paints and finishes
- MDF off-gassing
- Large freight loads

Lower-Impact Set Strategies

- Design for reuse, not disposal
- Avoid excessive custom builds
- Use mechanical fasteners instead of permanent adhesives
- Minimize MDF and solvent-heavy products
- Choose FSC-certified wood where available
- Source reclaimed lumber locally
- Maintain a regional scenic inventory

In remote regions, sharing build stock between companies can reduce material duplication.

Strike should not mean landfill.

Further reading
• Theatre Green Book – Sustainable Productions Toolkit
• Forest Stewardship Council (FSC) – Certified Wood

5. Paints, Adhesives & Finishes

Scenic and prop departments frequently use high-VOC products.

Exposure risks increase in winter when ventilation is limited.

Safer Practices

- Choose low-VOC paints
- Avoid aerosolized finishes when possible
- Improve ventilation during scenic painting
- Store chemicals in sealed, labelled containers
- Dispose of hazardous waste properly

Resources

• CCOHS – WHMIS Overview

• CCOHS – Chemical Storage & Disposal

Environmental sustainability includes occupational health.

Further reading
• CCOHS – WHMIS (GHS) Overview
• CCOHS – Chemical Storage & Disposal

6. Costumes & Wardrobe

Costume production involves textiles, dyes, laundering, and synthetic fibres. Environmental impacts include:

- Polyester microplastics
- Intensive laundering
- Fast-fashion sourcing
- Dye toxicity
- Shipping emissions

Sustainable Costume Practices

- Prioritize reuse and rentals
- Maintain a shared regional costume bank
- Choose natural fibres where possible
- Wash in cold water when appropriate
- Air dry when feasible
- Avoid unnecessary duplication
- Repair instead of replace

Slow costume design extends garment life and reduces embodied carbon.

Further reading
• Ellen MacArthur Foundation – Circular Economy for Fashion & Textiles

7. Touring & Transportation

Touring often represents the largest emission source in northern performing arts.

Long distances + limited rail = high air dependence.

Reduce Touring Impact

- Consolidate tour dates geographically
- Minimize freight weight
- Ship sets once; adapt locally
- Encourage carpooling for local audiences
- Offer digital components when appropriate
- Reduce crew travel where possible

Freight strategy matters as much as artistic strategy.

Resource

• Gallery Climate Coalition – Shipping Guidance

Further reading
• Gallery Climate Coalition – Travel Guidance
• Theatre Green Book – Touring Principles Toolkit

8. Audience Transportation

Audience travel frequently exceeds production emissions.

In remote regions, public transit may be limited.

Mitigation Strategies

- Coordinate ride-sharing boards
- Offer bike incentives where viable
- Align show times with transit schedules
- Partner with local shuttle providers
- Provide digital access for remote viewers

Audience engagement includes mobility planning.

9. Waste Management During Production

Productions generate:

- Lumber offcuts
- Fabric scraps
- Paint containers
- Packaging
- Food waste

In northern communities, recycling access may be limited.

Waste Reduction Strategies

- Track material flows during build
- Reuse flats and platforms
- Share excess materials between companies
- Compost where facilities exist
- Reduce single-use plastics backstage

Upstream reduction is more effective than downstream sorting.

Further reading
• Environment & Climate Change Canada – Hazardous Waste
• Alberta Environment – Hazardous Waste
• Regional Municipality of Wood Buffalo – Waste Services

10. Smoke, Haze & Air Quality

Theatrical haze and smoke effects increase particulate load.

In wildfire seasons, indoor air quality may already be compromised.

Consider:

- Reducing or eliminating haze effects
- Using low-toxicity haze fluids
- Monitoring indoor air quality
- Limiting atmospheric effects during poor AQI days

Artistic choice should consider cumulative exposure.

Further reading
• Alberta Air Quality Health Index (AQHI)
• Health Canada – Wildfire Smoke and Your Health

11. Food, Hospitality & Events

Performing arts events include receptions, festivals, and catering.

Environmental impact areas:

- Single-use plastics
- Imported food
- High-meat menus
- Wasteful buffets

Lower-Impact Approaches

- Reusable service ware
- Vegetarian-forward catering
- Local sourcing where available
- Accurate attendance estimates
- Compost coordination

Hospitality is part of the production footprint.

12. Repair & Reuse as Production Culture

Extraction economies normalise disposal.

Theatre can model another logic:

- Maintain tool libraries
- Store and catalogue scenic elements
- Archive and recirculate props
- Repair lighting equipment
- Share technical inventories regionally

Repair reduces material demand and budget strain.

Repair is production infrastructure.

Further reading
• Ellen MacArthur Foundation – Circular Economy Overview

13. Indigenous Land & Cultural Accountability

Northern performing arts operate on Indigenous land.

Environmental responsibility must include:

- Respect for cultural protocols
- Ethical collaboration
- Reciprocity
- Land-based knowledge recognition
- Consultation when working with land or place-based themes

Climate action without cultural accountability is incomplete.

14. Governance & Institutional Practice

Sustainable theatre extends beyond production.

Organisations can:

- Embed environmental language in mission statements
- Track basic carbon sources (energy, freight, travel)
- Include sustainability in design briefs

- Offer staff training
- Share knowledge publicly

Policy follows practice.

Practice builds culture.

Further reading
• albert – Carbon Calculator & Certification Toolkit (BAFTA)
• SCALE-LeSAUT – SAGE: Sustainable Arts & Green Ecosystems Toolkit

15. Slow Production & Scale Awareness

Large-scale spectacle is not the only artistic form.

In northern contexts:

- Smaller casts reduce travel
- Modular sets reduce freight
- Local performers reduce transport
- Longer runs reduce rebuild cycles

Scale is an environmental choice.

Further reading
• Theatre Green Book – Sustainable Productions Standard

Slower production cycles can increase sustainability and reduce burnout.

Closing

Safe and sustainable theatre in northern and remote regions is not about perfection. It is about:

- Planning with intention
- Reducing avoidable emissions
- Protecting worker health
- Designing for reuse
- Strengthening regional networks
- Working in relationship with land and community

Theatre is collective. Sustainability must be collective too.