



# Municipal Employees co-workshops: Issues and co-designed solutions table

Issues – Problems	Co-designed Problem Solutions: Policies and Implementation Measures
<b>Problem:</b> Lack of organized recycling system within the Municipality. <b>Description:</b> Insufficient infrastructure for waste sorting and recycling at the workplace. <b>Relevance:</b> Reduces environmental performance and increases landfill waste. <b>Issues:</b> Lack of awareness, logistics coordination, space limitations.	<b>Solution:</b> Implementation of organized recycling points with clear instructions on each floor. <b>Link to problem:</b> Addresses waste management inefficiency. <b>Pros:</b> Improves recycling rates, builds environmental responsibility. <b>Cons:</b> Requires regular monitoring and maintenance. <b>Alternatives:</b> Small pilot projects before full rollout. <b>Cost:</b> Low to medium. <b>Barriers/Difficulties:</b> Staff engagement, proper separation compliance.
<b>Problem:</b> No dedicated green waste composting system. <b>Description:</b> Municipal green waste is currently not composted or reused. <b>Relevance:</b> Wasted opportunity for circular economy practices. <b>Issues:</b> Land space needed, management structure.	<b>Solution:</b> Creation of a municipal 'green point' for composting plant waste. <b>Link to problem:</b> Reduces organic waste, produces compost for citizen use. <b>Pros:</b> Environmental benefits, citizen engagement. <b>Cons:</b> Needs continuous management. <b>Alternatives:</b> Partnership with farmers or cooperatives. <b>Cost:</b> Medium (initial setup and operation). <b>Barriers/Difficulties:</b> Staffing, land allocation.
<b>Problem:</b> High reliance on private vehicles by municipal employees. <b>Description:</b> Causes traffic congestion and emissions. <b>Relevance:</b> Direct impact on city sustainability goals. <b>Issues:</b> Resistance to carpooling, rigid work schedules.	<b>Solution:</b> Car-sharing program among employees with incentives. <b>Link to problem:</b> Reduces private vehicle use. <b>Pros:</b> Cuts emissions, saves costs. <b>Cons:</b> Scheduling conflicts, insurance matters. <b>Alternatives:</b> Promote public transport use instead. <b>Cost:</b> Low (coordination, initial incentives). <b>Barriers/Difficulties:</b> Cultural resistance, privacy concerns.





<b>Problem:</b> Inefficient use and disposal of resources (furniture, equipment). <b>Description:</b> Good-condition items discarded rather than reused. <b>Relevance:</b> Wasted material resources. <b>Issues:</b> Lack of structured system for item collection and redistribution.	<b>Solution:</b> Creation of an "Upcycle" room for collection and refurbishment. <b>Link to problem:</b> Promotes reuse and circular economy. <b>Pros:</b> Reduces waste, supports low-income citizens. <b>Cons:</b> Needs space, volunteers/staff. <b>Alternatives:</b> Partner with local NGOs. <b>Cost:</b> Low to medium. <b>Barriers/Difficulties:</b> Logistics, sorting system.
<b>Problem:</b> Traffic and parking congestion during municipal events. <b>Description:</b> Heavy car usage around event areas. <b>Relevance:</b> Increases emissions, worsens city center experience. <b>Issues:</b> Public reluctance to change transportation habits.	<b>Solution:</b> Pilot "Park and Ride" system for event attendees. <b>Link to problem:</b> Offers alternative transportation for event access. <b>Pros:</b> Reduces congestion, promotes sustainable mobility. <b>Cons:</b> Needs good communication strategy. <b>Alternatives:</b> Increase frequency of public transport during events. <b>Cost:</b> Medium (transport partnerships, communication). <b>Barriers/Difficulties:</b> Adoption rate, operational logistics.
<b>Problem:</b> High production of single-use plastics at municipal events. <b>Description:</b> Widespread plastic waste generation. <b>Relevance:</b> Environmental footprint increase. <b>Issues:</b> Vendor compliance, public acceptance.	<b>Solution:</b> Ban on single-use plastics at events, free reusable bottles and water stations. <b>Link to problem:</b> Reduces plastic waste generation. <b>Pros:</b> Eco-friendly image, waste reduction. <b>Cons:</b> Initial cost of reusable items. <b>Alternatives:</b> Encourage use but not mandatory. <b>Cost:</b> Medium (bottle distribution, water station setup). <b>Barriers/Difficulties:</b> Behavior change, vendor agreements.
<b>Problem:</b> Limited use of public transportation by citizens and staff. <b>Description:</b> Over-reliance on private cars. <b>Relevance:</b> Higher emissions, urban congestion. <b>Issues:</b> Public transport perceived as inconvenient.	<b>Solution:</b> Awareness campaigns, ticket subsidies, bus lane creation, route densification. <b>Link to problem:</b> Incentivizes public transport use. <b>Pros:</b> Reduces car use, emissions. <b>Cons:</b> Needs strong public messaging. <b>Alternatives:</b> Improve pedestrian and cycling infrastructure instead. <b>Cost:</b> Medium to high. <b>Barriers/Difficulties:</b> Funding, public acceptance.





<p><b>Problem:</b> Lack of a connected cycling infrastructure.</p> <p><b>Description:</b> Cycling network is fragmented.</p> <p><b>Relevance:</b> Hinders alternative mobility options.</p> <p><b>Issues:</b> Road space constraints, safety concerns.</p>	<p><b>Solution:</b> Integrate bike lanes in new roads, connect existing paths.</p> <p><b>Link to problem:</b> Builds continuous cycling network.</p> <p><b>Pros:</b> Safer cycling, more users.</p> <p><b>Cons:</b> Potential car traffic conflicts.</p> <p><b>Alternatives:</b> Shared streets for bikes and pedestrians.</p> <p><b>Cost:</b> Medium to high.</p> <p><b>Barriers/Difficulties:</b> Infrastructure funding, resident opposition.</p>
<p><b>Problem:</b> High energy consumption in municipal buildings.</p> <p><b>Description:</b> Inefficient building design and operations.</p> <p><b>Relevance:</b> High operational costs, large carbon footprint.</p> <p><b>Issues:</b> Budget constraints for retrofits.</p>	<p><b>Solution:</b> Retrofit buildings for energy efficiency, use renewables.</p> <p><b>Link to problem:</b> Cuts down emissions and costs.</p> <p><b>Pros:</b> Long-term savings, resilience.</p> <p><b>Cons:</b> High initial cost.</p> <p><b>Alternatives:</b> Focus on low-cost measures first (LEDs, smart systems).</p> <p><b>Cost:</b> High.</p> <p><b>Barriers/Difficulties:</b> Upfront financing, project management.</p>
<p><b>Problem:</b> Limited digitalization of municipal services.</p> <p><b>Description:</b> High need for physical visits for service access.</p> <p><b>Relevance:</b> Inefficient for citizens, causes extra transport needs.</p> <p><b>Issues:</b> Staff training, system setup cost.</p>	<p><b>Solution:</b> Expand e-governance offerings.</p> <p><b>Link to problem:</b> Reduces need for in-person visits.</p> <p><b>Pros:</b> Increases efficiency, citizen satisfaction.</p> <p><b>Cons:</b> Cybersecurity concerns.</p> <p><b>Alternatives:</b> Hybrid systems (online + in-person).</p> <p><b>Cost:</b> Medium.</p> <p><b>Barriers/Difficulties:</b> Resistance to change, digital literacy gaps.</p>

