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Background

- With the development of economic, waste disposal is a global concern, giving rise to significant environmental, social and economic challenges.
- The circular economy (CE) is regarded as a systemic solution to natural resources' over-extraction and waste management.
- The public sector is a major participant in the market economy and an important purchaser of goods and services (Klein, 2020).
- Public procurement has the responsibility to lead sustainable consumption and production (Bosio, 2020).
- Effective circular procurement (CP) can avoid the exceed generation of waste and contribute to the achievement of the Sustainable Development Goals.
- The public sector can make a significant contribution to the sustainability of production and consumption by implementing circular purchasing (Wurster, 2021).

What is Circular Procurement

'circular procurement' is an extension of existing sustainable procurement practices. Circular procurement extends beyond 'traditional' sustainable procurement by actively contributing to closing energy and material loops within supply chains, while minimising any negative environmental impact or waste creation across their whole life cycle (Zero waste Scotland, 2023).

Circular Procurement Strategies

- Reduce** Rethink the demand specification: what is needed? Could a product be replaced with a service? Could ownership of this product be shared?
- Re-Use** If a product is needed, its use phase and end-of-life must be re-considered.
- Recycle** Ensure the product is made of recyclable material, and even better, made from recycled materials.
- Recover** Can specify design for recovery in tenders and procure the recovered products.
- Servitization** Manufacturer or service provider retains ownership of the product, the customer uses products by leasing or paying (Han et al., 2020).
- Digitalisation** Close the material loops by transforming the product from a physical state to a digital state.
- Shared-Ownership** Customer shifts from owning products towards using, sharing, borrowing and renting them (Lehtinen, 2020).

Research Gaps

- Lack of criteria and methods to assess compliance of circular procurement policies with circular economy principles.
- Lack of analysis of factors influencing public sector circular procurement.
- Lack of research on understanding taxpayer attitudes and supplier selection criteria.

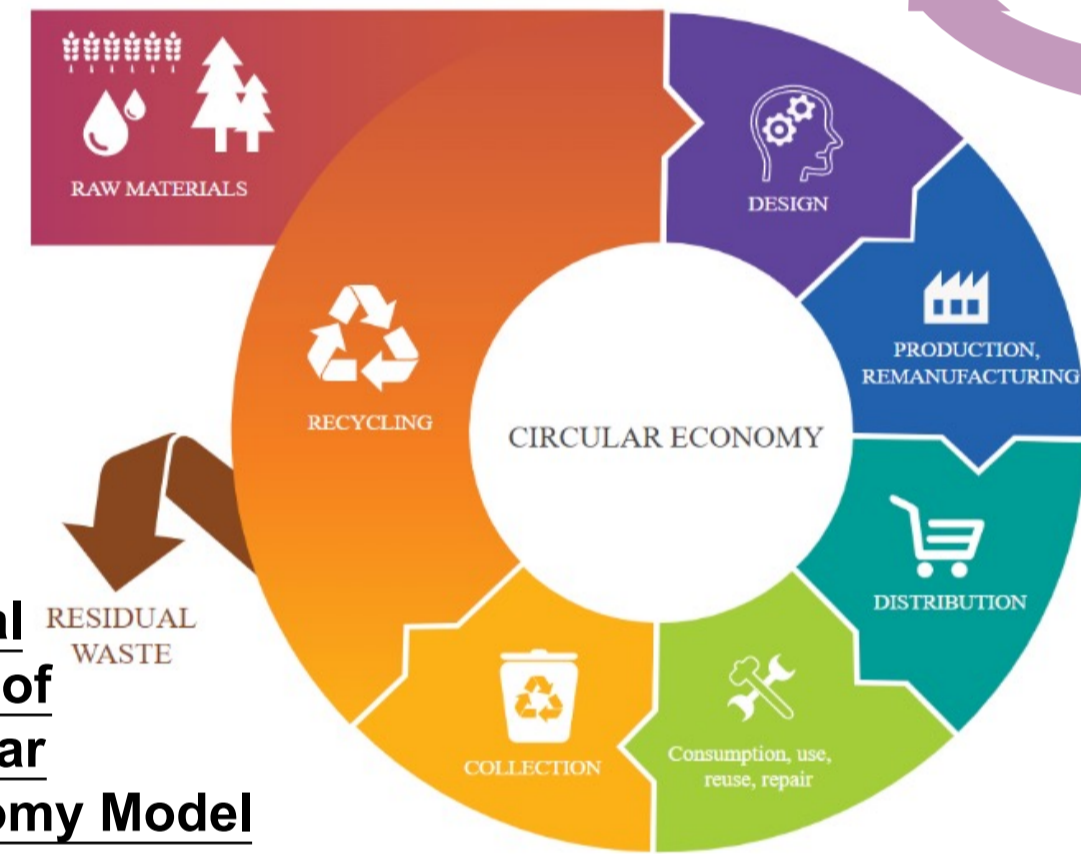
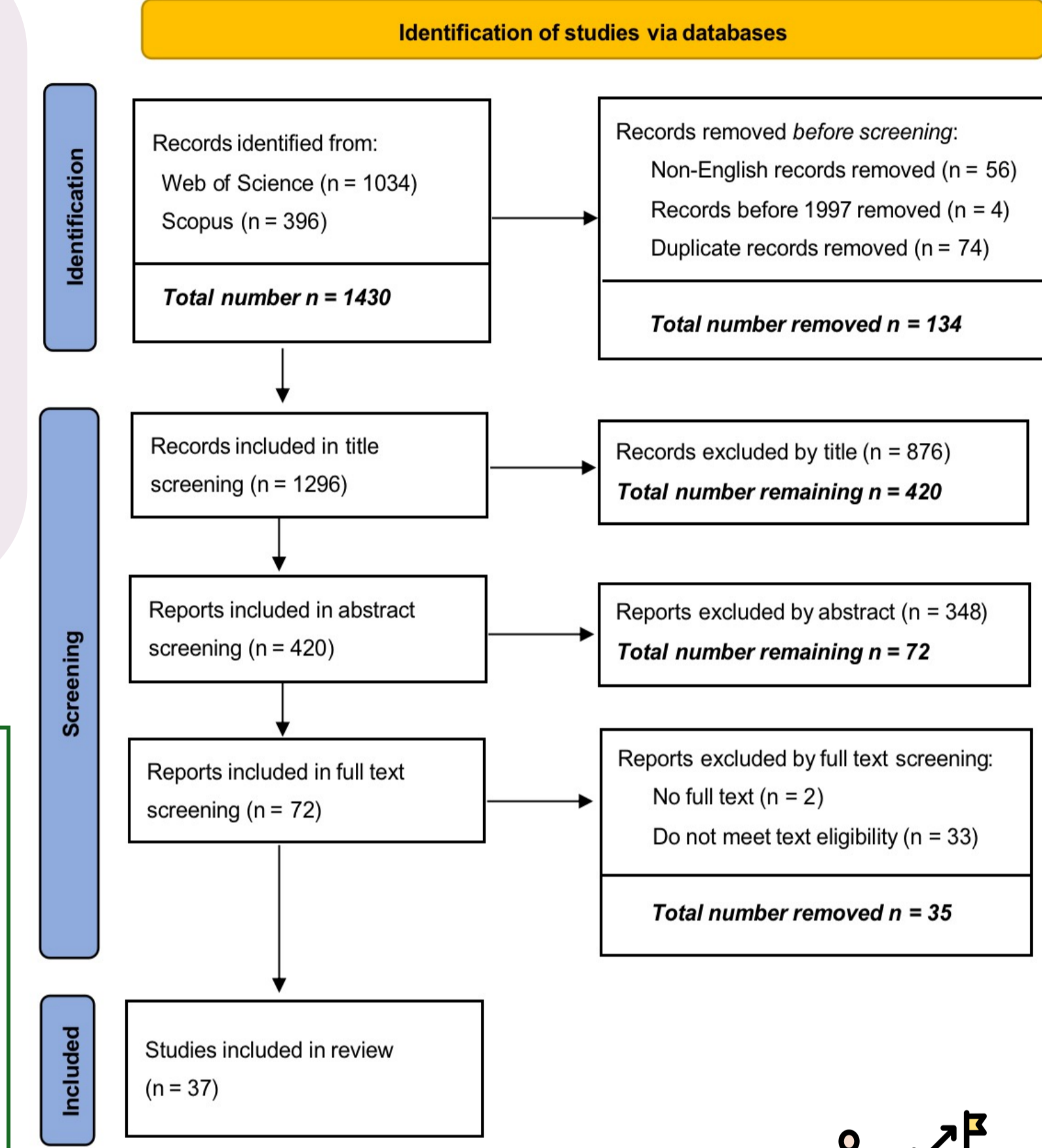
Research Aim

To design a conceptual framework for assessing whether circular public procurement policies are consistent with circular economy principles.

Research Objectives

- To address deficiencies in CPP understandings and develop a systematic evaluation of CPP definition.
- To assess the sustainable level and status of current circular public procurement policies and identify any gaps to the expected vision of circular economy transition.
- To explore the opportunities and challenges faced by circular public procurement policies from formulation to practice, and identify the problems and obstacles encountered in implementation.
- To examine the willingness of stakeholders for circular public procurement policies, as well as to understand the public's payment preferences on relative policies.

Systematic Review Process



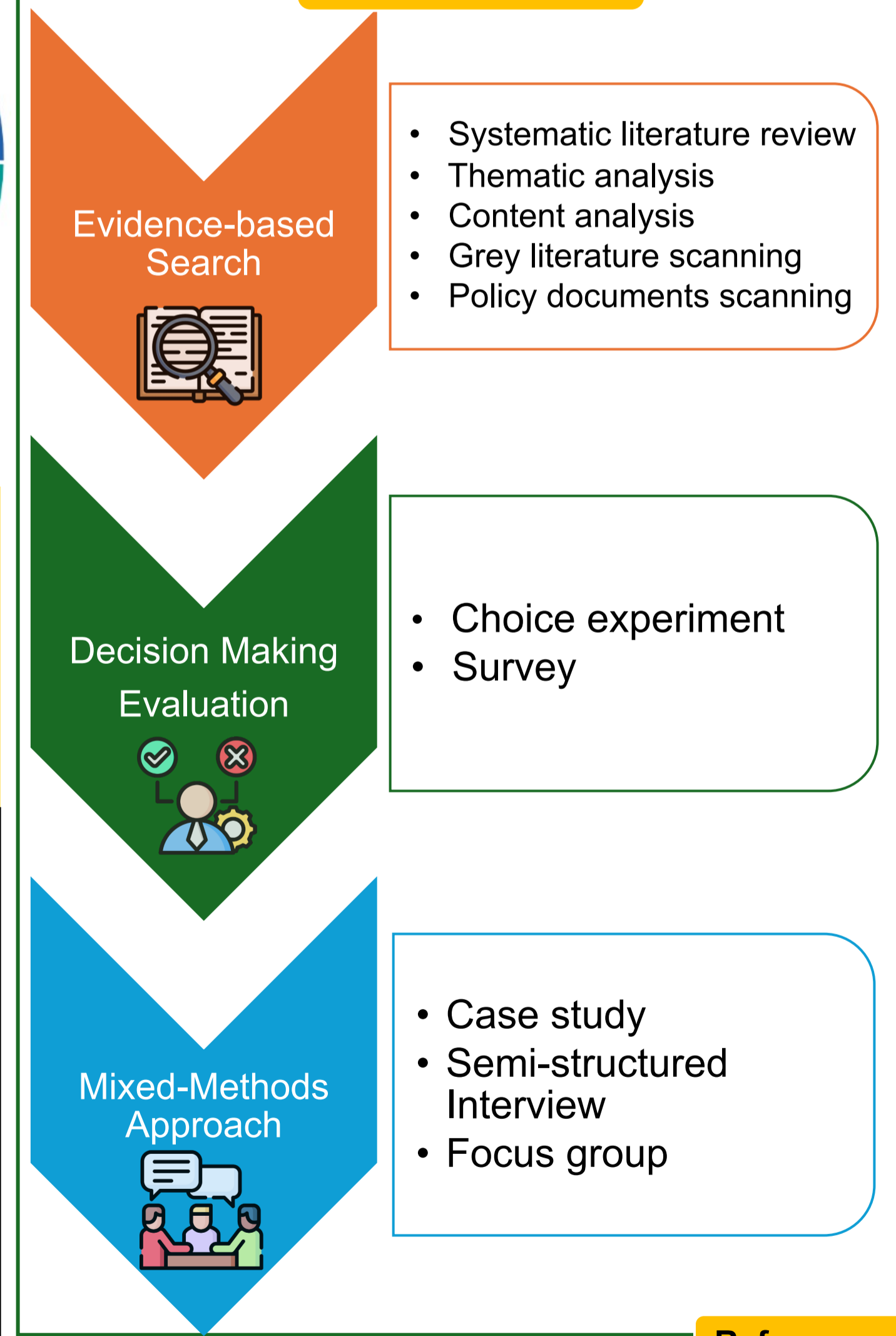
The Typical Logic of Circular Economy Model

Research Questions

Primary question:
 "How to assess whether public sector procurement initiatives are aligned with circular economy principles?"

1. What are the definition and scope of circular procurement in public sectors?	2. What are the challenges and determinants of implementing circular public procurement in various public sectors?	3. What is the public's willingness to pay for circular economy public procurement policies?
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Methodology



References

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Research Significance

- Provide assessment and recommendations for improving circular procurement policies in the public sector.
- Identify enabling and evidence-based conditions for the promotion of circular procurement in the government and social sectors.
- Clarify the motivations that drive people's participation in circular public procurement and promote the stakeholders' engagement.

Next Steps

- Extract and synthesise data from the results of systematic literature reviews to form the discussion and results section.
- Identify the types of public sectors and target positions to interview in the future.