

# Law of Resources Circulation

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**1.Content of Research**

**2.Achievement of World-leading or Taiwan-leading**

**3.Achievement of Key Performance Indicator**

**4.Difficulties and Solutions**



# 1. Content of Research

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- Interview the NGOs, research institutions, and recycling businesses
  - (1) The Schedule:
    - June – August: complete the interviews of NGOs and research institutes.
    - October – November: propose the preliminary regulatory structure
  - (2) The list of Interviews:
    - NGOs: Tainan Community University(台南社區大學), Taiwan Water Protection Union(水資源保育聯盟), Citizen of the Earth(地球公民基金會), Taiwan Watch(看守台灣協會), Green Formosa Front(綠色陣線), and the Formosa Association of Resource Recycling(台灣資源再生協會).
    - Research Institutes: Taiwan Green Productivity Foundation(綠色生產力基金會), and Institute of Environment and Resource(環境資源研究發展基金會).



# 1. Content of Research

Type	Respondent	Position	Organization	Introduction of the Organization
Environmental NGOs	HUANG, Huan-Zhang	Leader of the Environmental Action Group	Tainan Community University	An ENGO which dedicate themselves in tracking illegal dumping of waste.
	XIE, He-Lin	Secretary General	Taiwan Watch	An ENGO which focuses on toxic chemical substances and waste.
Research Institutes	LIU, Lan-Ping	Assistant General Manager	Taiwan Green Productivity Foundation	A research institute which support governments and private sectors conducting environmental protection projects.
	CAO, Mei-Hui	Leader of the Environmental Education Group	Institute of Environment and Resource	A research institute which specializes in environmental policy research. And also a think-tank that supports the Environmental Protection Administration.
	Yan, Mei-Fang	Legal Advisor		

Table 1: The list of Respondents



# 1. Content of Research

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- (3) The Design of Interview Questions
  - There are in total 8 interview questions ( 1/2 ) .
    - What is your point of view on “critical strategic material”?
    - Current necessity of “domestic critical strategic material” in Taiwan?
    - Agree with “The EPA policy of import mixed metal scrap and the implementation of the guidance of the Basel Convention”?
    - Agree with “statement of the EPA that “most of the WEEE has been announced as regulated recyclable waste. The recycling rate of the WEEE reached 80.41% in 2012, in which 80% was transformed into renewable resources.”



# 1. Content of Research

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- (3) The Design of Interview Questions
  - There are in total 8 interview questions ( 1/2 ) .
    - what are the most crucial issues that should be included in policy-making, If the new policy on recycling and recovery of critical metal would be proposed?
    - Following the above question, what are the principles, and what should be included in the regulations in order to minimize environmental risk?
    - Following the question No.6, are there any regulations directly related to recycling and recovery of critical metal? Based on the current Waste Disposal Act, what might be obstacles to recycle critical metal?
  - Aims at : enquiring Environmental NGOs' opinions on critical strategic materials, imported mixed waste scrap, recycling and recovery of critical metal.



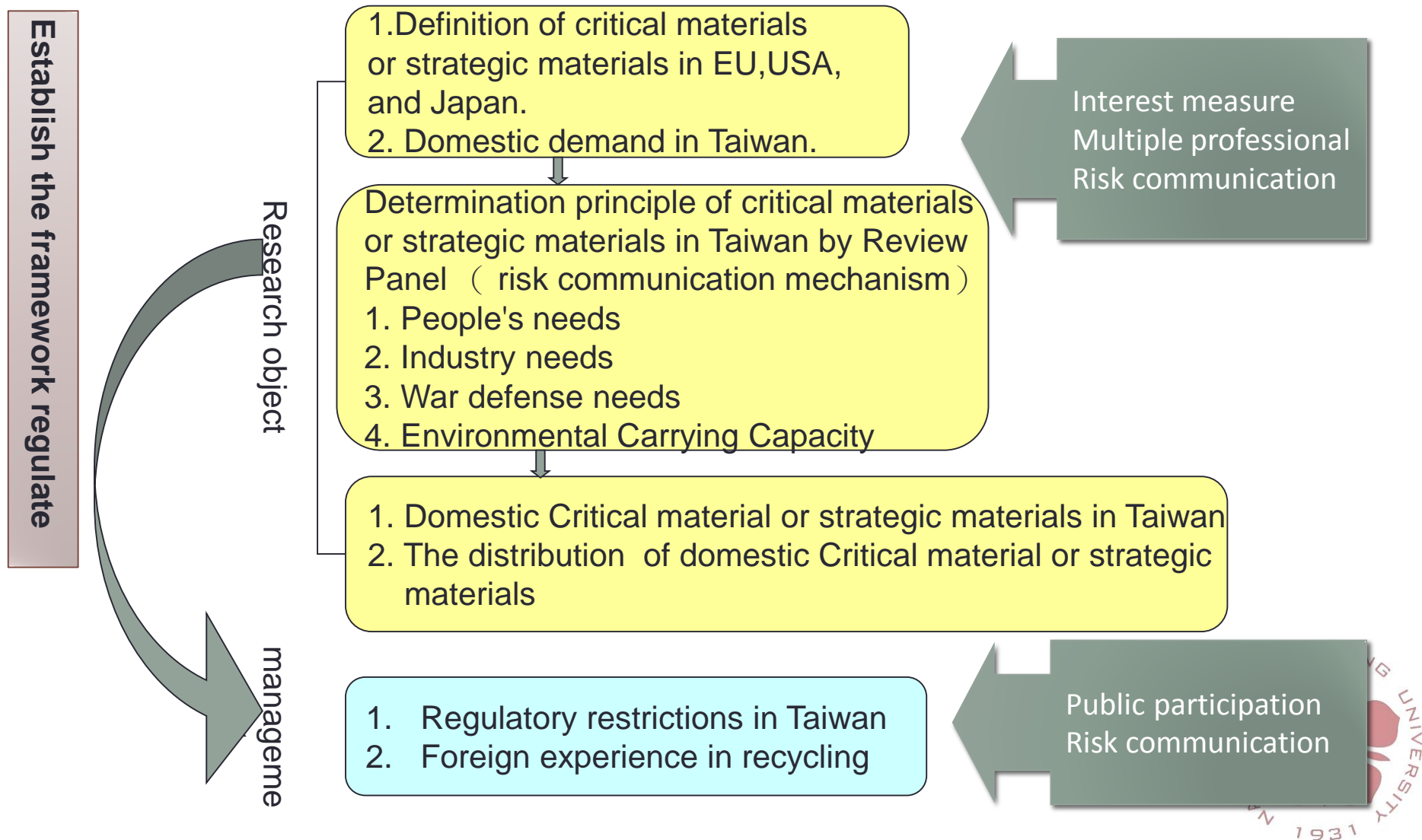
# 1. Content of Research

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- (4) Discussions and Conclusions of interview the NGOs, research institutions
  - The definition of critical metals is ambiguous, and the scope of jurisdiction regarding to critical metals needs to be clarified.
  - The problems with tracking of waste material flows and illegal dumping
  - The dilemma of import and export of WEEE
  - Insufficiency of the facilities and technologies of critical metal recycling
  - Final treatment, disposition, and regulation of recycling derived waste
  - Lack of risk communication between the government and the publics in the current regulations



# 1. Content of Research





初步規範架構

- 1. 國際上對稀有金屬 (Critical material) 之定義
- 2. 台灣本土需求

利益衡量  
多元專業  
風險溝通

選擇研究對象

- 由審議小組判定本土Critical material之原則 (風險溝通機制) :
- 1. 民生需求
- 2. 產業需求
- 3. 國防戰爭需求
- 4. 環境承载力

- 1. 篩選出本土Critical material
- 2. 了解本土Critical material分佈情形

管理規劃

- 1. 國內法規問題探討
- 2. 國外循環利用經驗探討

民眾參與  
風險溝通

## 2. Achievement of World-leading or Taiwan-leading

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- Establish determination principle of critical materials or strategic materials in Taiwan
- The main considerations for :
  - People's needs
  - Industry needs
  - War defense needs
  - Environmental Carrying Capacity
- The decision is made by Review Panel with risk communication mechanism.



# 3. Achievement of Key Performance Indicator

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- A journal articles in SCI.(eg. Journal of Environmental Planning and Management)





# 4. Difficulties and Solutions

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- Difficulties:
  - It's hard to define the critical materials or strategic materials, because there is no consistent viewpoint among counties.
- Solutions:
  - Reference EU, USA, and Japan to determination principle of critical materials or strategic materials in Taiwan
  - Suggests group a Review Panel with risk communication mechanism.

