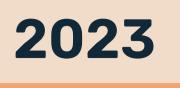


### INEFFECTIVE WASTE MANAGEMENT IN CIVIL WORKS IN ARGENTINA: GLOBAL PERSPECTIVES ON EFFECTIVE WASTE DISPOSAL REGULATION

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Students: **DELFINA BERTOSSI AND MATÍAS GASTALDI** 

Teacher: GRACIELA ELIZABETH YUGDAR TÓFALO







### ADVANCES IN TECHNOLOGY



### CONSTRUCTION AND DEMOLITION WASTE





### NEGATIVE IMPACT ON THE ENVIRONMENT



### INADEQUATE WASTE MANAGEMENT



### Investigate the disposal of CDW in developed countries

### Raise awareness about the pollution generated by CDW.

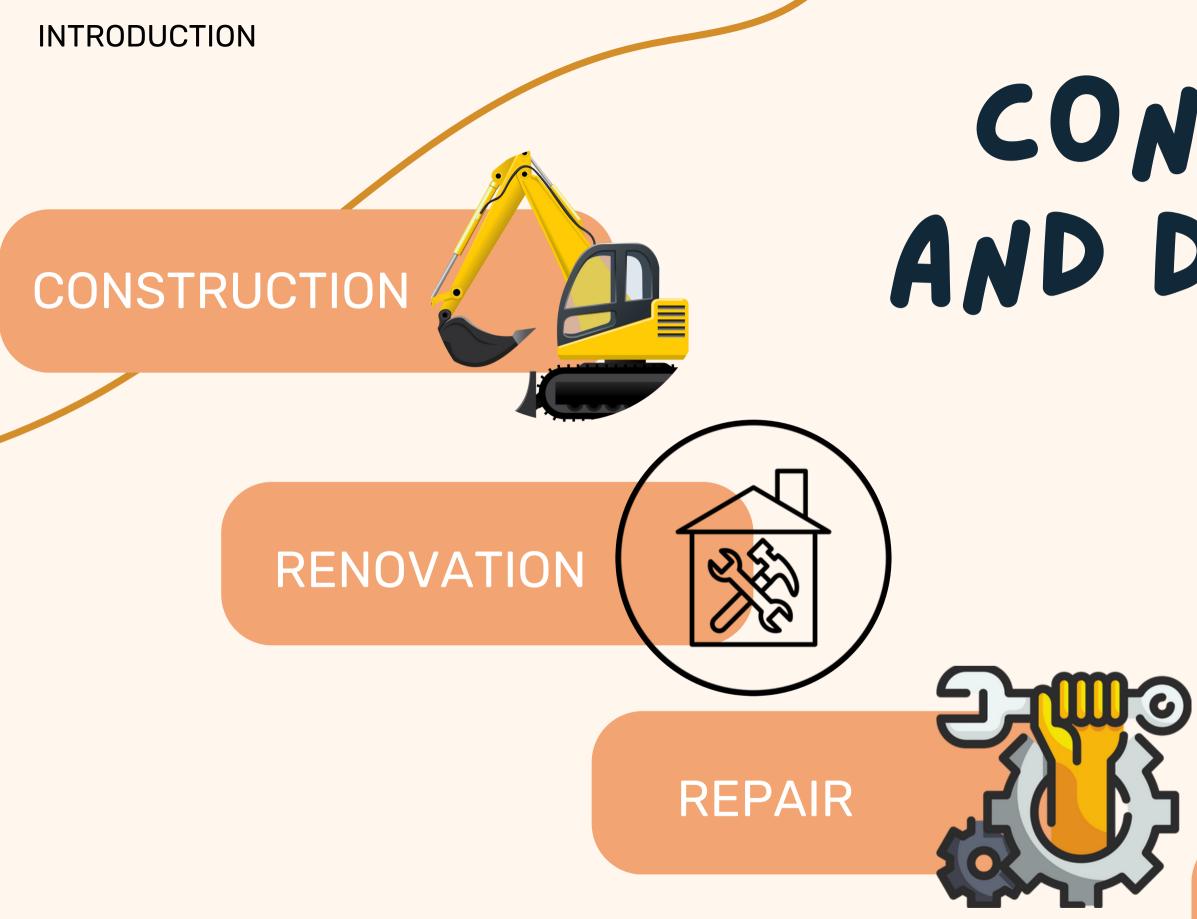




Argentina needs to adopt sustainable measures for the recycling or proper disposal of construction and demolition waste







# CONSTRUCTION AND DEMOLITION WASTE

### DEMOLITION





### **SUSTAINABLE CITIES** AND COMMUNITIES

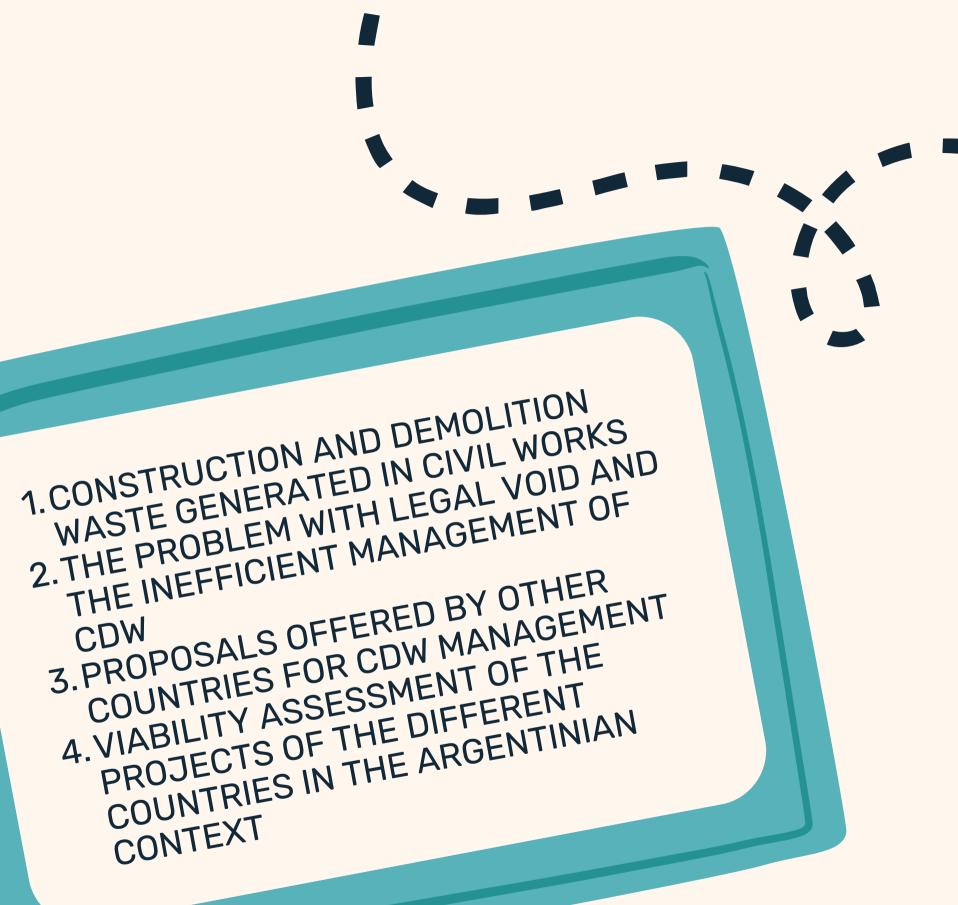




### SUSTAINABLE DEVELOPMENT GALS

# MAP OF PRESENTATION

CONTEXT



# IMPACT WE WANT TO GENERATE

### THIS UNDERTAKING IS EXPECTED TO ENHANCE PUBLIC UNDERSTANDING OF THE ENVIRONMENTAL POLLUTION CAUSED BY CDW DISPOSAL.



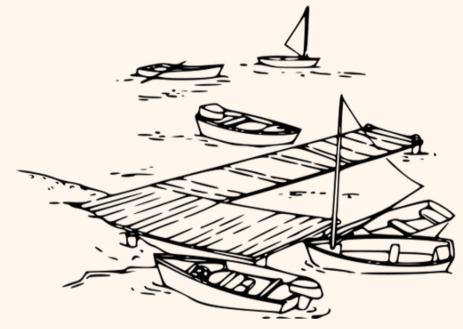


# CDW GENERATED IN CIVIL WORKS

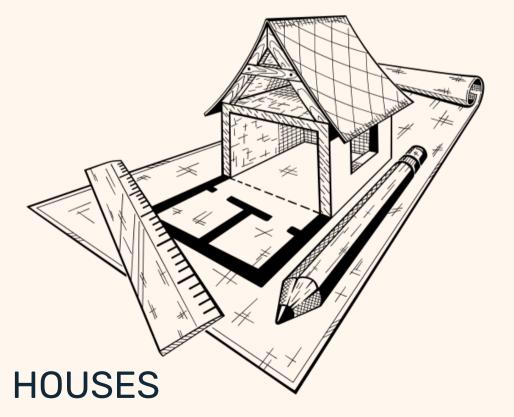


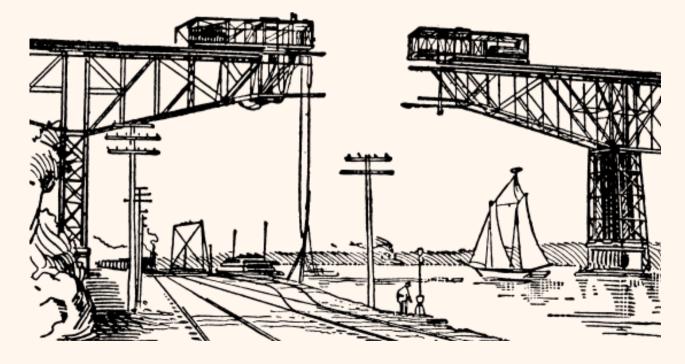
# CONSTRUCTION AND DEMOLITION WASTE

PIERS









BRIDGES



DAMS

### CDW GENERATED IN CIVIL WORKS

# DUMP WASTE IN ARGENTINA





### **CDW GENERATED IN CIVIL WORKS**

### CLASSIFICATION

	LEGAL	
TYPE OF WASTE	CLASSIFICATION IN	
	CONNECTICUT	

Landclearing debris	Bulky waste	
Demolition waste (from buildings)	Bulky waste	Concre w
<b>Construction waste</b>	Municipal solid	Pallets
(from buildings)	waste	scraps, pa
Highway	Bulky waste,	Asphal
construction and	municipal solid	demolit
demolition waste	waste	
Oversized MSW	Municipal solid waste	Fu

"What is Construction and Demolition Waste?". portal.ct.gov. https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/Construction-and-Demolition-Waste/What-is-CD-Waste (accessed Sep. 1, 2023).





### Tree stumps, tree tops

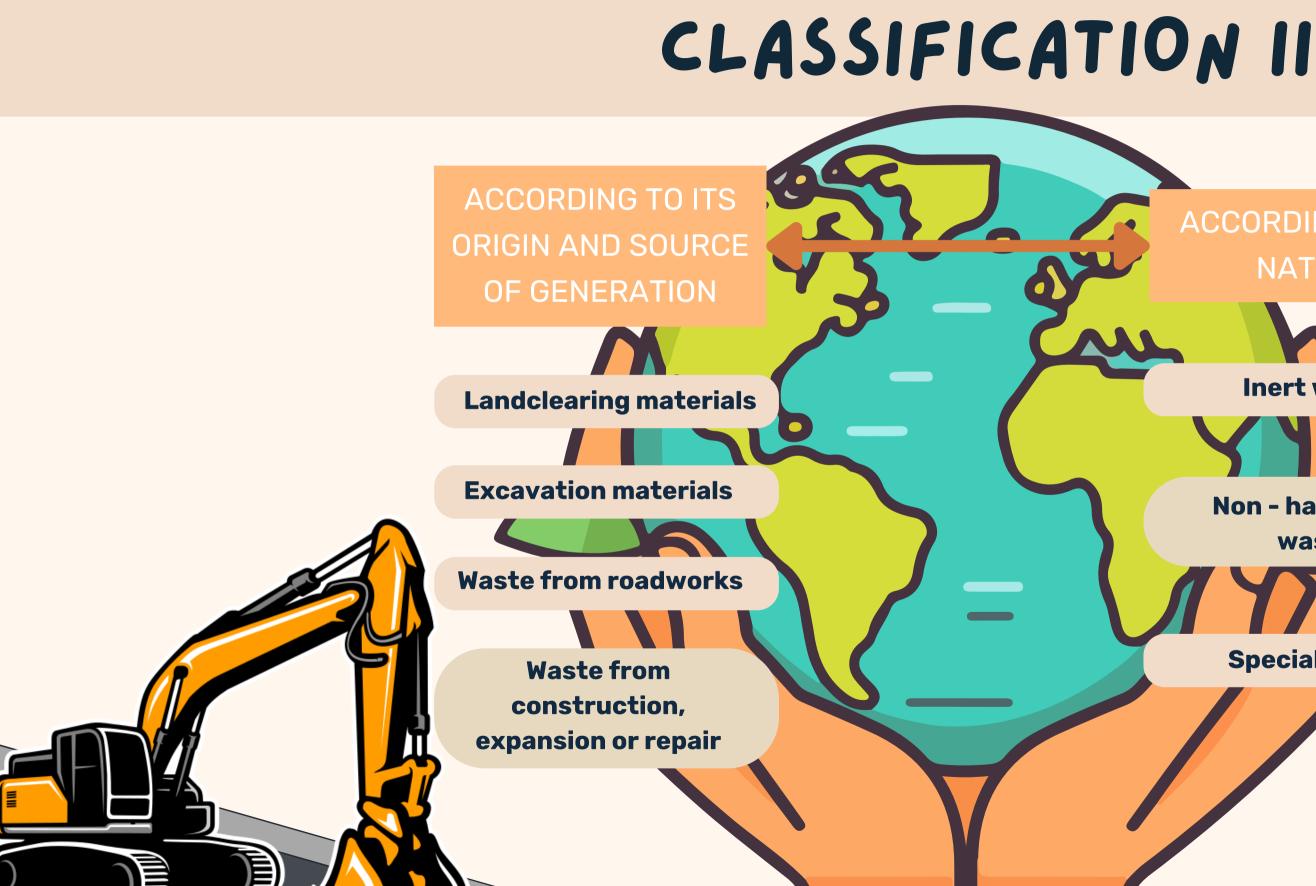
rete, wood, brick, plaster, roofing materials, wallboard, metals, carpeting, insulation

s, wood scraps, wallboard, siding and roofing packaging, carpeting. Foam padding, insulation

alt, concrete, steel, related construction and ition wastes, utility poles, railroad ties, brick, block, rock

### Furniture, furnishings, carpeting, rugs

### **CDW GENERATED IN CIVIL WORKS**









Inert waste





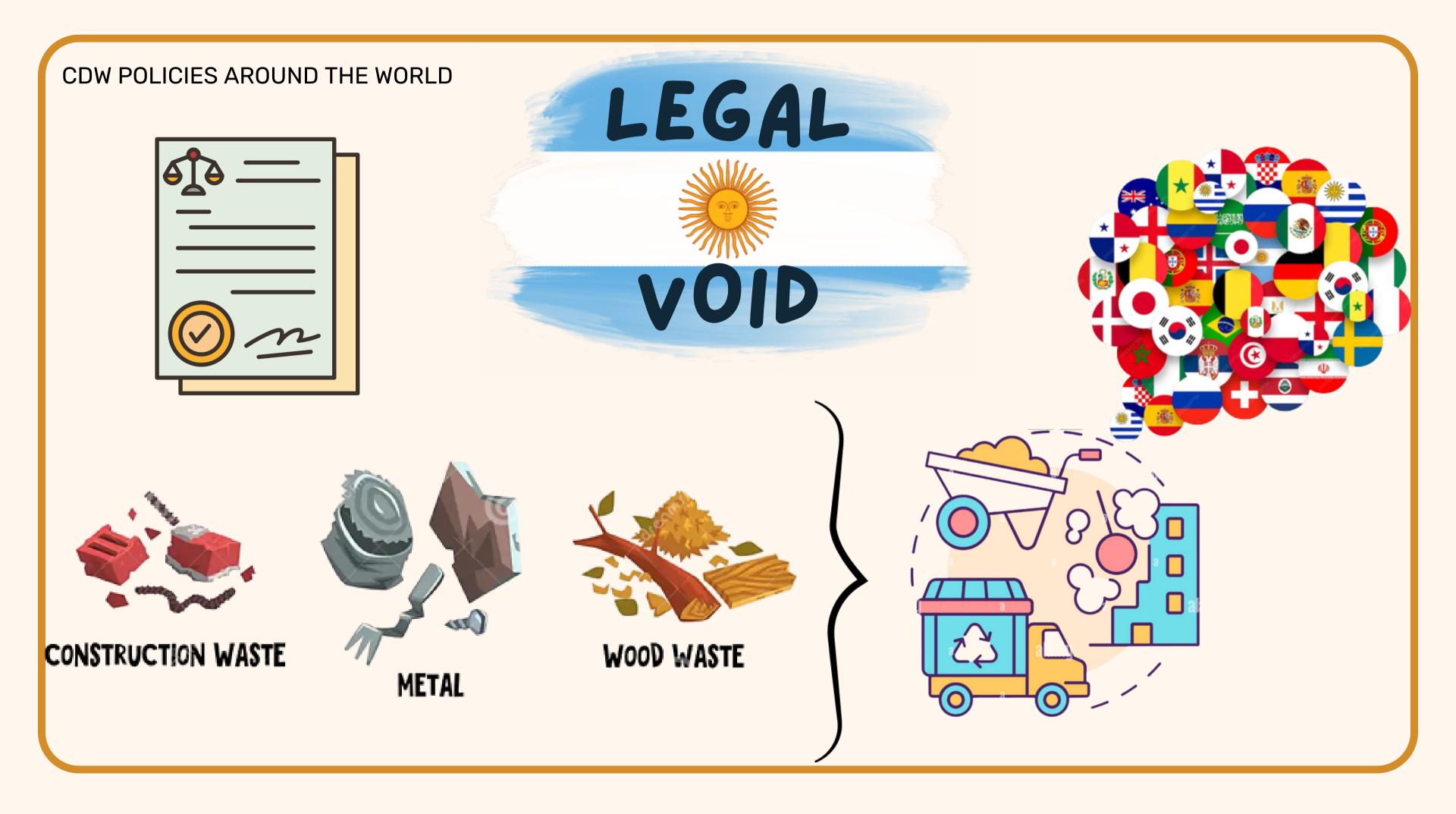
waste



Special waste













EEUU



**EUROPEAN UNION** 

CHINA





GERMANY



# CHINA

### China has established a comprehesive set of policies and regulations to promote construction and demolition waste management.



# THE UNITED STATES 7

The United States has state - level policies and

regulations for construction and demolition waste

management, but implementation is challenging due to

lack of resources and public awareness.



# EUROPEAN UNION

The European Union has established a comprehesive waste management framework for construction and demolition waste, prioritizing prevention, reuse and recycling.



# GERMANY

The management of construction and demolition waste is governed by the Life Cycle of Building Materials Act. This law mandates that construction and demolition waste should be recycled and reused to the greatest extent possible.

# SOUTH KOREA

South Korea's construction and demolition waste management system is a comprehesive approach that involves government regulation, producer responsibility, industry innovation, and public education

# **AUSTRALIA** In Australia, based on its type, construction and demolition waste is divided into different categories: recycled, reused or disposed.



















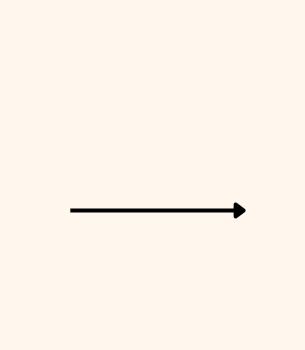














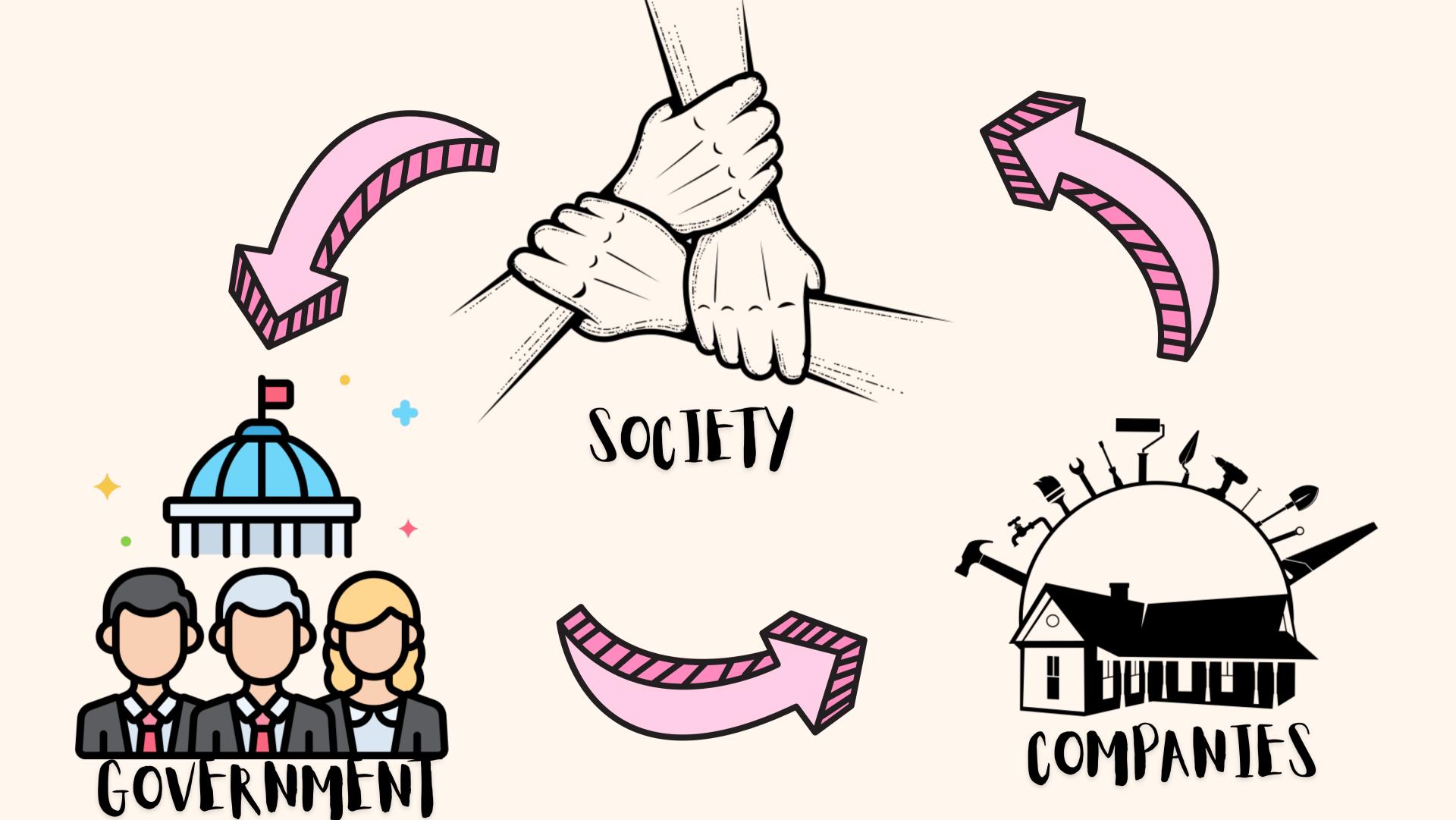






### FEASIBILITY OF ASPECTS OF FOREIGN SYSTEMS OF CDW MANAGEMENT IN ARGENTINA





## THE IMPLEMENTATION OF A CDW MANAGEMENT SYSTEM

### ADVANTAGES

The materials that remain as waste can be reused for different purposes:

- Masonry waste can be converted into aggregates.
- Combustible waste can become alternative fuel for energy recovery.
- Non-recyclable waste can be disposed of in municipal garbage dumps.

The creation of new recycling plants would generate a new field of competition within the sector and, consequently, generate new jobs.

There would be less environmental pollution, less global warming and less gas emissions.

The transportation of waste to the plants is carried out with trucks that pollute the air with their engines. Thus, this pollution can have an unwanted negative effect on the environment.

### DISADVANTAGE



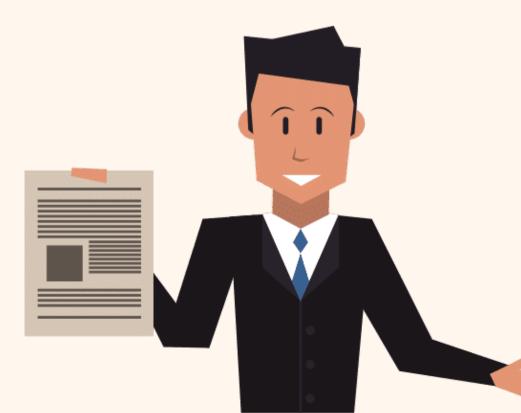






## CONCLUSION











### CONCLUSION



# THE PRESENT

# SOCIETY GOVERNMENT COMPANIES

# REFERENCES

- 1. NU. CEPAL, "The 2030 Agenda and the Sustainable Development Goals: The 17 Goals". Available: https://sdgs.un.org/es/goals (accessed May 18th, 2023).
- 2.1. T. Mercante, "Caracterización de residuos de la construcción. Aplicación de los índices de generación a la gestión ambiental". Revista Científica de UCES, vol. XI, no. 2, pp. Primavera. 2007. Accessed: July. 23, 2023. [Online]. Available: http://dspace.uces.edu.ar:8180/jspui/bitstream/123456789/152/1/Caracterizaci%C3%B3n\_de\_residuos.pdf
- 3. Connecticut, "What is Construction and Demolition Waste?". portal.ct.gov. https://portal.ct.gov/DEEP/Waste-Management-and-Disposal/Construction-and-Demolition-Waste/What-is-CD-Waste (accessed Sep. 1, 2023).
- 4.A. S. Muhammad, H. Beijia, C. Lifeng, "Review of construction and demolition waste management in China and USA". Journal of Environmental Management, vol. 264, June 15, 2020. Accessed: September 12, 2023. [Online]. Available: http://www.elsevier.com/locate/jenvman
- 5.K.R.A Nunes, C.F. Mahler, "Comparison of construction and demolition waste management between Brazil, European Union and US". Waste Management & Research: The Journal for a Sustainable Circular Economy (WM&R), vol 8, no 1. 2020. Accessed: September 12, 2023. [Online]. Available: journals.sagepub.com/home/wmr
- 6. European Commission. "EU Construction & Demolition Waste Management Protocol". September, 2016. Accessed: September 12, 2023. [Online] Available: https://sdgs.un.org/partnerships/eu-construction-demolition-waste-management-protocol-guidelines-and-business-models
- 7.K. Jeonghyun. "Construction and demolition waste management in Korea: recycled aggregate and its application". July 28, 2021. [Online]. Available: https://link.springer.com/article/10.1007/s10098-021-02177-x
- 8.W. Huanyu, Z. Jian, Y. Hongping, Z. George, W. Jianyuan, "Cross-regional mobility of construction and demolition waste in Australia: An exploratory study". Resources Conservation & Recycling, vol 156, no 1. 2020. Accessed: September 12, 2023. [Online]. Available: www.elsevier.com/locate/resconrec
- 9.A. A. Savino and E. de Titto. (2020). Sustainable Waste Management Challenges in Argentina. [Online]. Available: https://www.academia.edu/40745781/Sustainable\_Waste\_Management\_Challenges\_in\_Argentina





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