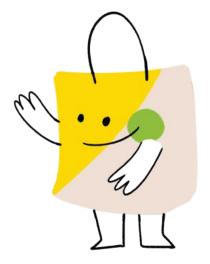


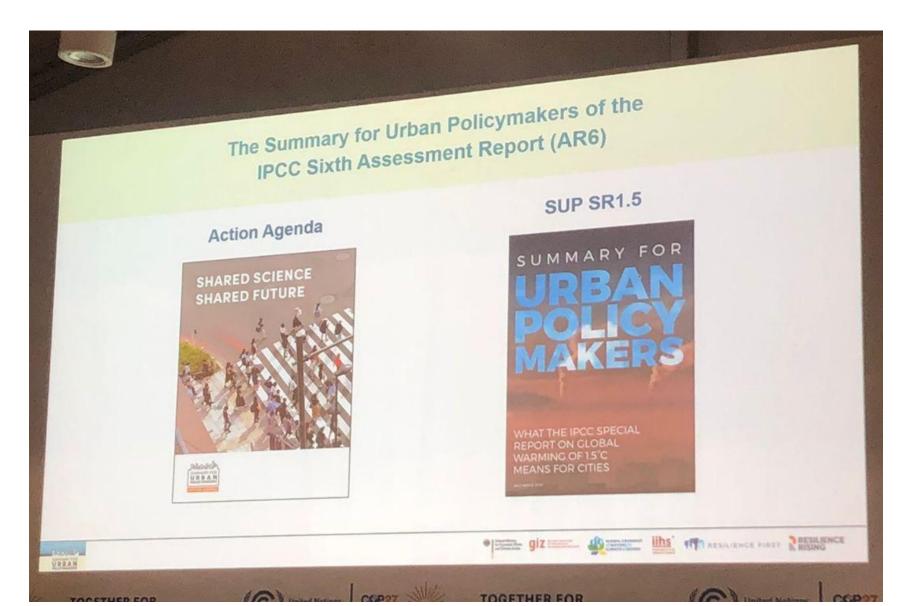
### Organic waste management in Lviv story

#### Iryna Myronova

Executive director of Zero Waste Lviv Zero Waste Alliance Ukraine



### Good news from CoP27





There are multiple feasible mitigation options and synergies between mitigation action and sustainable development across key urban sectors and approaches.

		Mitigation Response Options	Overall Feasibility	Relation with Sustainable Development Goals													
		Solar Energy	•							1000		-	eres in				
		Wind energy			*	*			*	+	+	*		÷	*		*
	a l	Geothermal	•	+	*	+			+	+	+	+		+	*	*	*
	Energy	Energy storage for low-carbon grids		*		*			*	٠		+		+			
	2	Demand side mitigation		-	-			-		-	-						
		System Integration		- 1				1	•		*	•	*	•			
		Urban land use and spatial planning															
		Electrification of the urban energy	•	+	*	+	+	+	+	+	+	+	*	+	*	*	*
		system			-		-	-	-	-	-	-		-	-		
	8	District heating and cooling networks	8	X	×	-	-		-	1	1			-	×	*	*
	4	Urban green and blue infrastructure	~	1	-	X	-		-	1	T	-	-	1	1	-	:
	-51	Waste prevention, minimization and	0		*	-	-				-		-			-	4
		management Integrating sectors, strategies and	•	+	+	*			+		*	+					
		Innovations															
			•	+	٠	+	+	٠	٠	٠	+	+	٠	+	٠	+	+
	-11	Building design and performance				-			120								
		Change in construction methods and		+	87	1			+	+	*		+	+	+		4
		circular economy	•			+			*	+	*	+		+	+		
		Envelope Improvement		-													
	Building	Heating, ventilation and air conditioning (HVAC)		H	*	*	+		+	*	*	*	*	*	+		
		Efficient Appliances	•	*	+	+			+	+		*	*	+	+		
	Bull	Change in construction materials	0	*	+	+	+	+	+	+	**	-	*	+	*		
		Demand Side management (active	•			+			*	+	*	+			+	+	-
		management operation, digitalization	•	*	*	+	+	+	*	*	*	*	*	+	+		
		and flexible comfort requirements)															
		Renewable energy production															
		internet analy production	•	+		*	+	+			-	-	-	-			
	41	Demand reduction and mode shift															
	ð	Biofuels for land transport, aviation,		-	14	T		10		+	+	*		+	+	2	
	5	and shipping	•		*	*				+	+	-	ŝ.	+	3	*	*
	T	Electric vehicles for land transport															
			•				*				-	-	- 4	-		-	*

RESILIENCE

RESILIENCE FIRST

- Trada-offi

RAIDPAR

URBAN

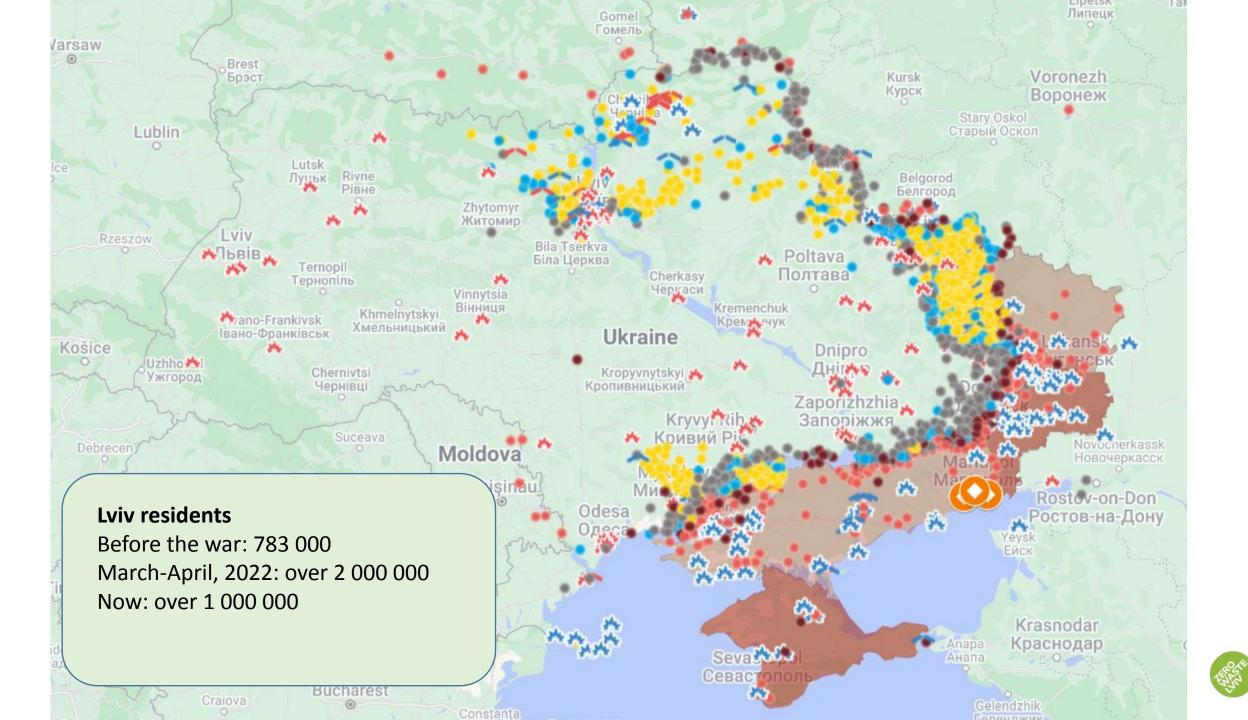
Synergies and trade-offs Blanks represent no assessment

assessment

Overall Feasibility

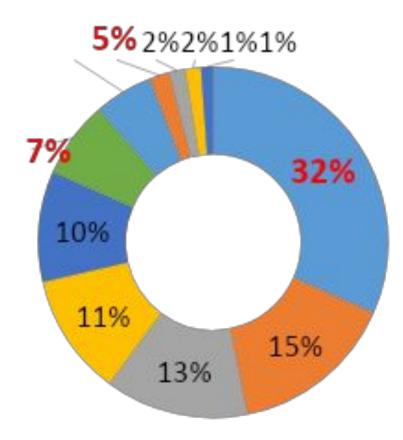
High Medium L

Figure Source: Derived from IPCC AR6 WGIII, Summary for Policymakers, SPM.8



June 2016 Landfill fire, which led to closure of the landfill

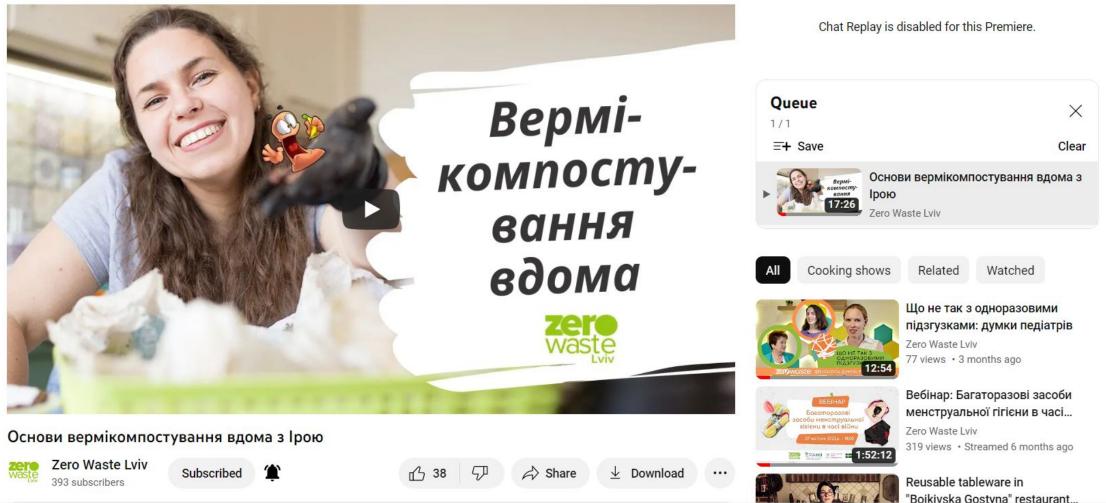
## Morphology of residential mixed waste in Lviv, 2017



- харчові відходи
- дрібні елементи
- ■пластмаси
- санітарні текстильні матеріали
- ■скло
- відходи з саду (городу)
- папір та картон
- небезпечні відходи
- ■метали
- композитні матеріали
- текстильні матеріали



### Individual composting: scare people that they will have to live with worms in their



1500

### 'People will never ever separate organics' - they said...



2019: Pilot project of decentralized composting with 4 condominiums, Funded by Lviv City Council

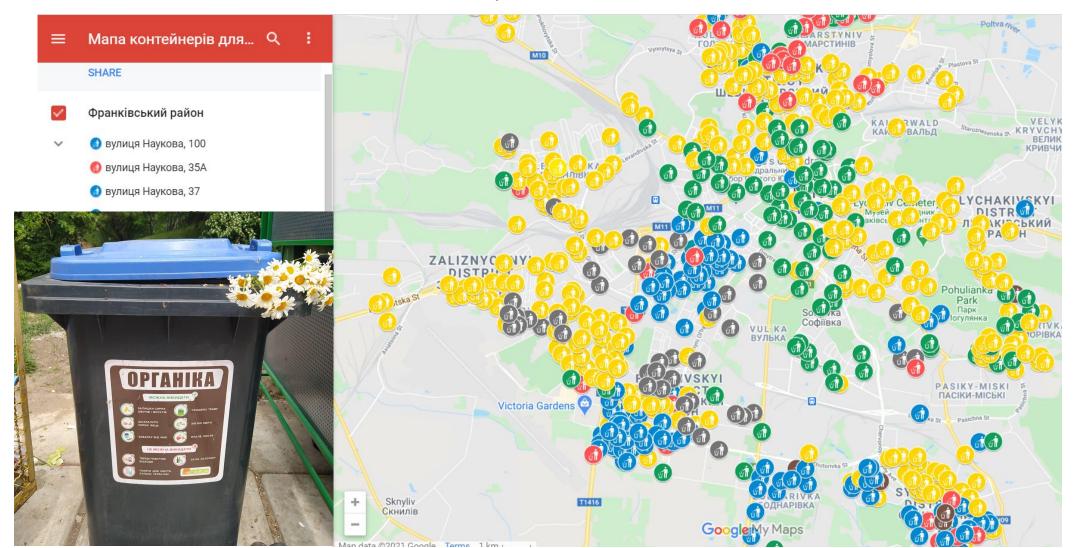
Today more than 70 composters around the city



### Centralized composting: way to go



## City wide collection from residents: 98% covered by the end of 2021



# Municipal composting station for green and kitchen waste from citizens and businesses



## Green waste deposit and composting



## Self delivered organic waste from morkets





## Organic waste from the restaurants





## Municipal company reports the results monthly: Results for April 2022







http://zelenemisto.info/projects/kompostuvannya-organichnyh-vidhodiv/

### Challenges ahead:

- How to scale up the collection and processing
- No bags / plastic bags / biodegradable bags trilemma
- Tariff for organic waste collection
- Quality of the service by all 5 waste transport companies
- Collection from HoReCa in the city center



### Challenges to overcome



### Thank you!

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