

# The impact of Covid -19 Pandemic in municipal solid waste production

## The case study of Ayia Napa Municipality

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# Covid -19 Pandemic

According to WHO, a pandemic is considered as “*an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people*” (WHO, 2020).



On 11 March 2020, the World Health Organization classified the coronavirus as a pandemic, indicating the uncontrolled spread of the virus and the need for stricter measures.



The COVID-19 pandemic was confirmed to have reached Cyprus in **March 2020**



# Coronavirus: Timeline of the Covid-19 outbreak in Cyprus

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## 4 stages

- i. “Import” to Cyprus in March (9/3/2020)
- ii. Lockdown
- iii. Almost disappear at the end of May
- iv. Reappearance in Autumn

# Covid -19 Pandemic / Prevention measures in Cyprus

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**11/3/2020:** forbidding gatherings of over until March 31.

**13/3/2020:** closing schools

**14/3/2020:** flight cancellations until 30/5/2020 (the flight ban was extended until May 22)

**23/3/2020:** general lockdown until 13/5/2020

**1/6/2020:** reopening hotels

**9/6/2020:** lift flight ban

# Covid -19 Pandemic / impacts

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## IMPACTS ON:

- social
- economic
- environmental dimensions globally

# Covid -19 Pandemic / impacts



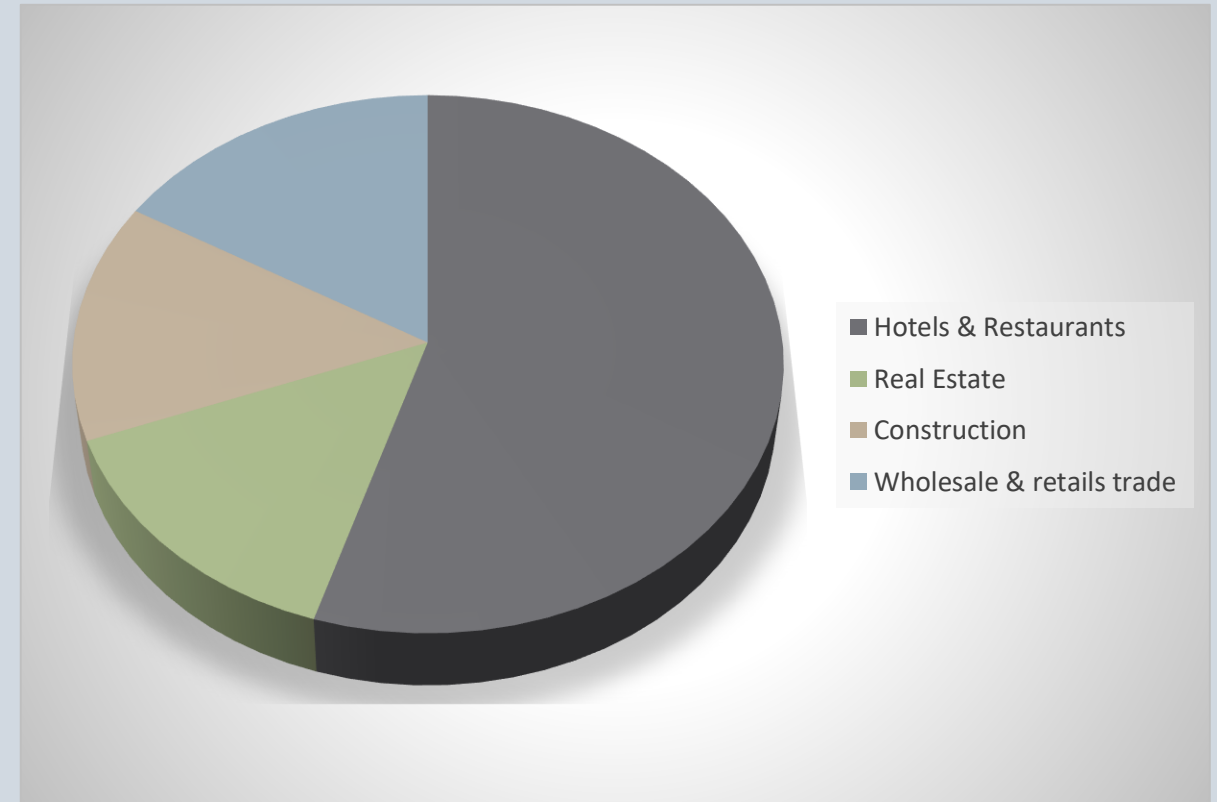
COVID-19 generates several indirect and direct effects on the environment.

*increasing overall health and safety of cities by reducing:*

- ❖ the greenhouse gas emissions,
- ❖ outdoor air pollution,
- ❖ environmental noise level
- ❖ waste production

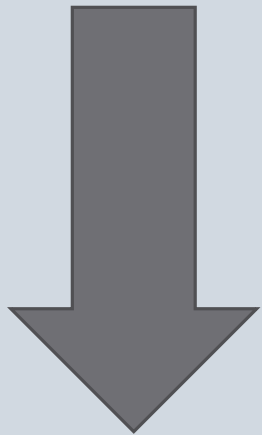
# Covid -19 Pandemic / impacts in Cyprus

Most adversely impacted sectors	Gross value added (GVA)
Hotels & Restaurants	- 80%
Real Estate	-21%
Construction	-21%
Wholesale & retails trade	-24%



# Covid -19 Pandemic / impacts in Cyprus

	2019	2020
Tourist Arrival	3 976 777	631 609



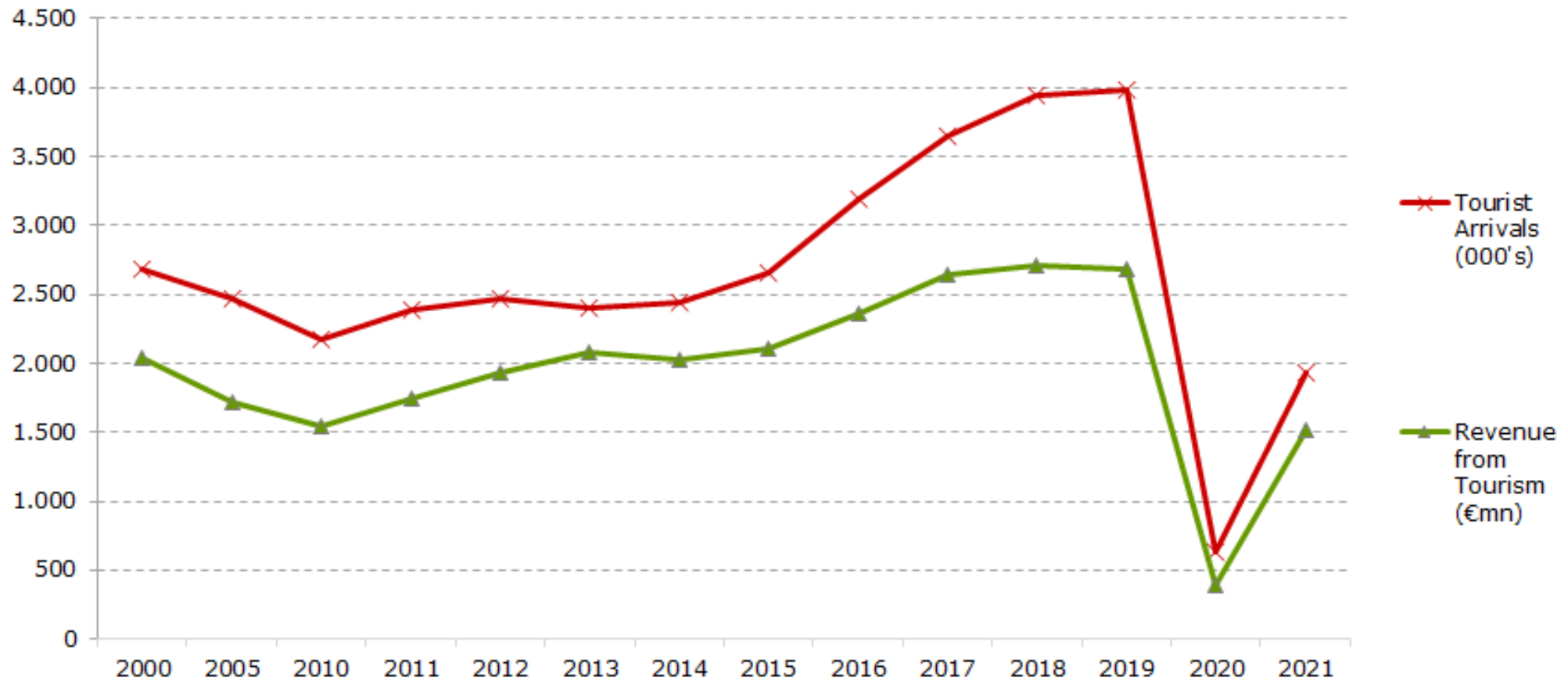
**- 84%**





# Covid -19 Pandemic / impacts in Cyprus

Arrivals of Tourists and Revenue



# Solid waste production in Cyprus 2020

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- ❑ In Cyprus in 2020, according to CyStat, the total amount of municipal solid waste produced amounted to 543 000 tons, compared to 571 000 in 2019, recording a decrease of 4.9% (78.8% was disposed in landfills)
- ❑ According to data from Green Dot, in 2020, a total of 27319 tons of waste were recycled.
- ❑ In 2020, the average municipal waste generation per capita in the European Union was 505 kg. In Cyprus, the per capita production of municipal waste reached 609 kg
  - Denmark has the highest production of municipal waste per capita (845 kg)
  - Luxembourg (790 kg),
  - Malta (643 kg),
  - Germany (632 kg) and
  - Cyprus (609 kg)

# Covid -19 Pandemic / The case study of Ayia Napa Municipality



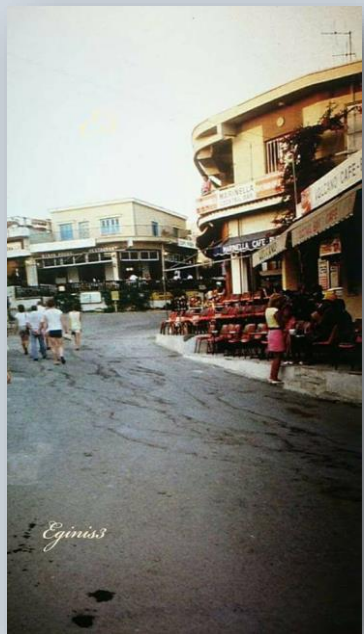
Ayia Napa Municipality, located on the southeast coast of Cyprus and is the largest tourist resort in Cyprus, with approximately 22000-person-bed capacity and more than 175 hotels and apartments of all sizes.

According to the latest statistic data, its permanent population amounts to 3212, while, the population increases dramatically during the summer period (potentially 47 000).





# AYIA NAPA Past Vs Today



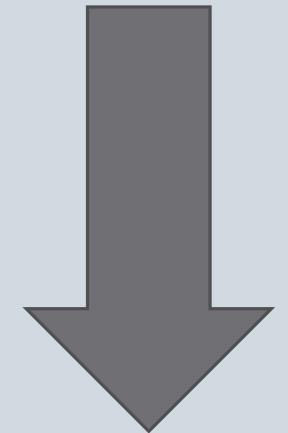
# Covid -19 Pandemic / Ayia Napa Municipality

## Tourist Arrival

	2019	2020
Tourist Arrival	576 694	218 509

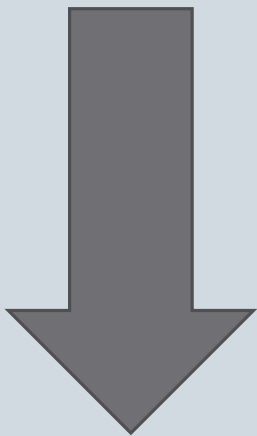


- 63%



## Solid Waste Production

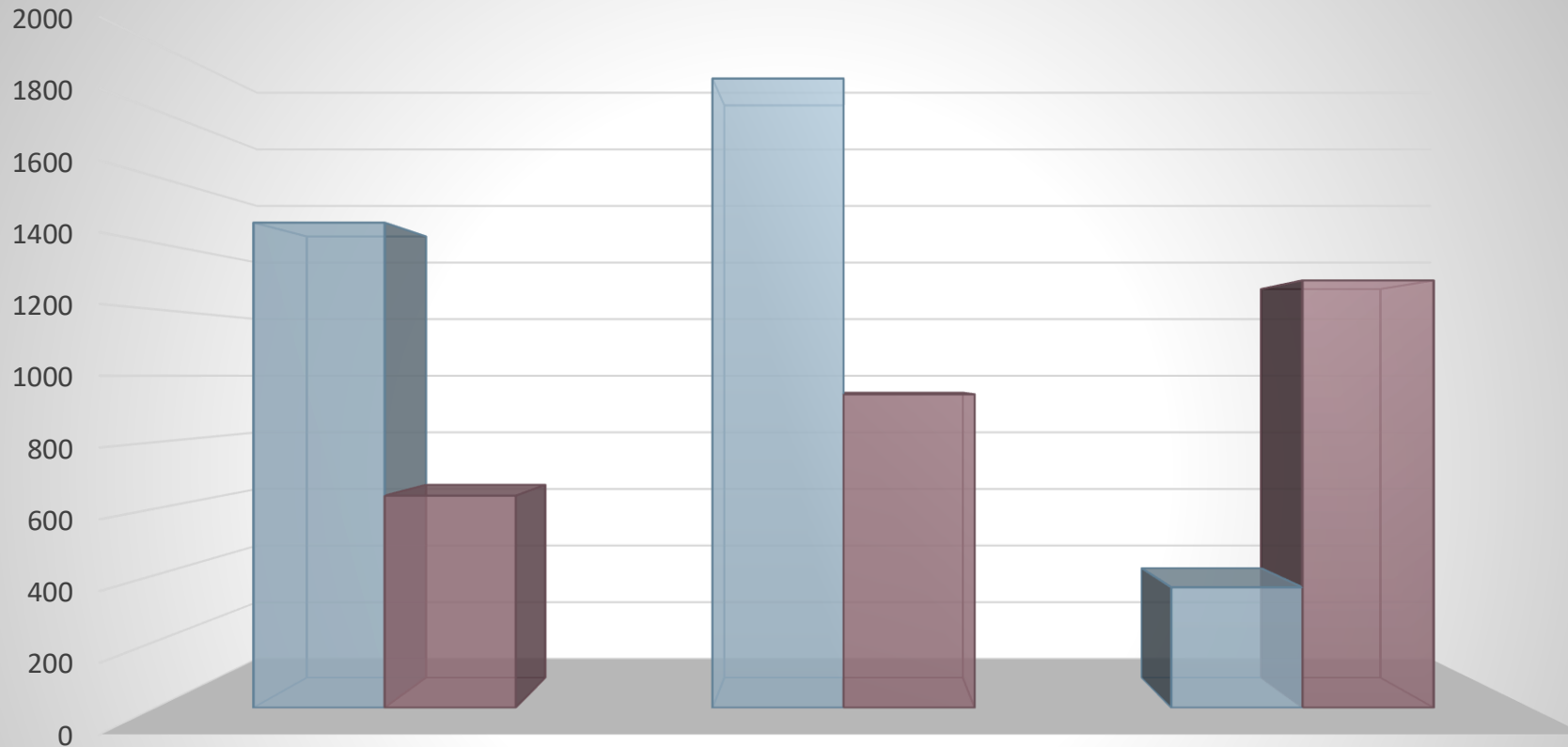
- 62%



MUNICIPAL SOLID WASTE (tn)	
2019	2020
14771	5478



# Ayia Napa Solid waste production



	RECYCLABLE WASTE (tn)	BULKY WASTE (tn)	GREEN WASTE (tn)
2019	1461	1895	363
2020	639	944	1287



# Conclusion

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- ❑ COVID-19 pandemic and the taken prevention measures, **impacted the dynamics** of cities in many ways worldwide.
- ❑ *On one hand* COVID-19 pandemic caused multiple health problems resulting more than five million people deaths worldwide,
- ❑ *On the other hand* seems to be indirectly contributing towards the Sustainable Development Goals **by increasing overall health and safety**

# Conclusion

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- At present, it is unclear how long and deep the crisis will be and how the waste production, waste management, will be affected or improved.
- A pandemic (i.e., COVID-19) seems to temporarily improve all Key Performance indicators
- Nevertheless, **a pandemic can not be the panacea solution** to control and minimize any environmental issue, but the solution is the development of a waste strategy to address all environmental problems.
- The COVID-19 pandemic can help all the competent authorities *to start from scratch to propose a new strategy, targeting sustainable planning and management.*





*Go green.. There is no Planet B*

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