



WORKING WITH CITIES WORLDWIDE  
TO KEEP PLASTIC OUT OF NATURE BY 2030

**Giorgio Bagordo**  
**Senior Expert Plastic Campaigns – WWF Italia**  
**Coordinatore Regionale Iniziativa Plastic Smart Cities Mediterraneo**

# POLLUTION FROM PLASTICS - **A THREAT TO NATURE AND SOCIETY**

**Since 2000, the plastics industry has produced as much plastic as all the preceding years combined.** The production of virgin plastic has increased 200-fold since 1950, and has grown at a rate of 4 per cent a year since 2000<sup>34</sup>. In 2016, the most recent year for which data is available, production reached 396 million metric tons. That is equivalent to 53 kilograms of plastic for each person on the planet. Production of plastic in 2016 resulted in approximately 2 billion metric tons of carbon dioxide emissions, which accounts for almost 6 per cent of the year's total global carbon dioxide emissions<sup>35</sup>. If all predicted plastic production capacity is constructed, current production could increase by 40 per cent by 2030<sup>36</sup>.

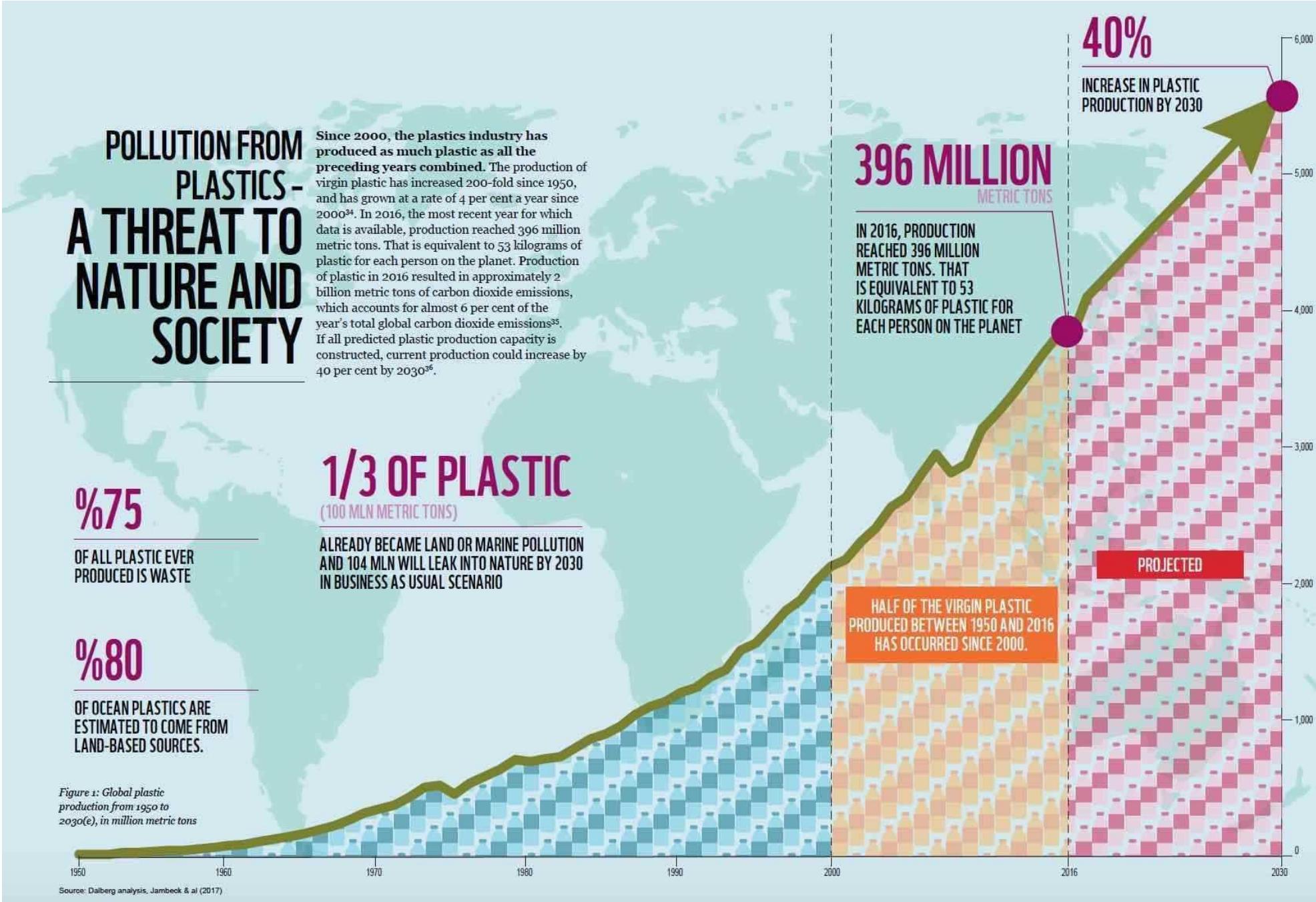
**%75**  
OF ALL PLASTIC EVER  
PRODUCED IS WASTE

**%80**  
OF OCEAN PLASTICS ARE  
ESTIMATED TO COME FROM  
LAND-BASED SOURCES.

# 1/3 OF PLASTIC

(100 MLN METRIC TONS)

**ALREADY BECAME LAND OR MARINE POLLUTION  
AND 104 MLN WILL LEAK INTO NATURE BY 2030  
IN BUSINESS AS USUAL SCENARIO**





Data from "Plastic waste inputs from land into the ocean" by Jenna Jambeck and others, published in *Science* (2015);  
map developed by <https://www.unenvironment.org/interactive/beat-plastic-pollution/>

# WWF - No Plastics in Nature Initiative

L'Iniziativa del WWF "No Plastic in Nature" (No plastica in Natura)\* affronta la tematica lungo tutto il ciclo di vita della Plastica:

- **riducendo** la quantità di nuova plastica prodotta
- **incrementando** il riuso di plastica già in circolazione
- **eliminando** la dispersione di plastica in natura

L'Iniziativa si basa su tre colonne::

- Global Governance
- Business Engagement
- Plastic Smart Cities



WE NEED A  
GLOBAL TREATY  
ON MARINE  
PLASTICS  
 POLLUTION



\* [https://wwf.panda.org/discover/our\\_focus/markets/no\\_plastic\\_in\\_nature\\_new/](https://wwf.panda.org/discover/our_focus/markets/no_plastic_in_nature_new/)

# Plastic Smart Cities Global

PLASTIC  
SMARTCITIES



# Perchè il focus sulle città?

55% della popolazione  
globale

Vive in aree urbane, oggi.

68% della popolazione  
globale

Vivrà in aree urbane nel 2050.

Oggi si stima che il 60%  
dei rifiuti marini di  
plastica provenga da  
centri urbani [1]

[1] Lebreton, L., Andrade, A. [Future scenarios of global plastic waste generation and disposal](#).  
Palgrave Commun 5, 6 (2019);

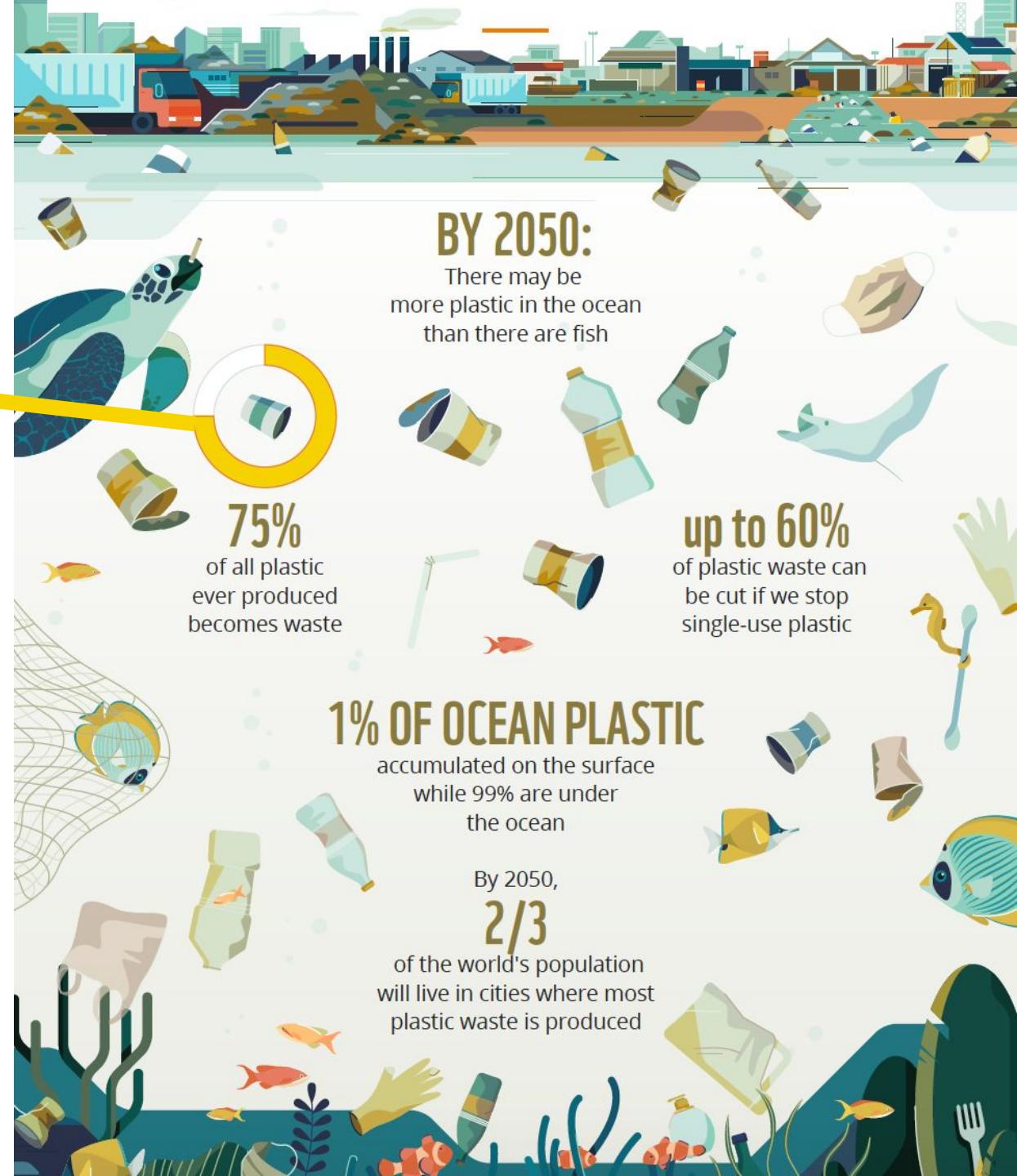


SOURCE: UN Department of  
Economic and Social Affairs

# In un sistema lineare la plastica è: Prodotta Usata una volta Scartata

Quasi la metà di tutti i prodotti in plastica è stata prodotta dopo il 2000 [2] e oltre il 75% di tutta la plastica mai prodotta è già diventata rifiuto [3].

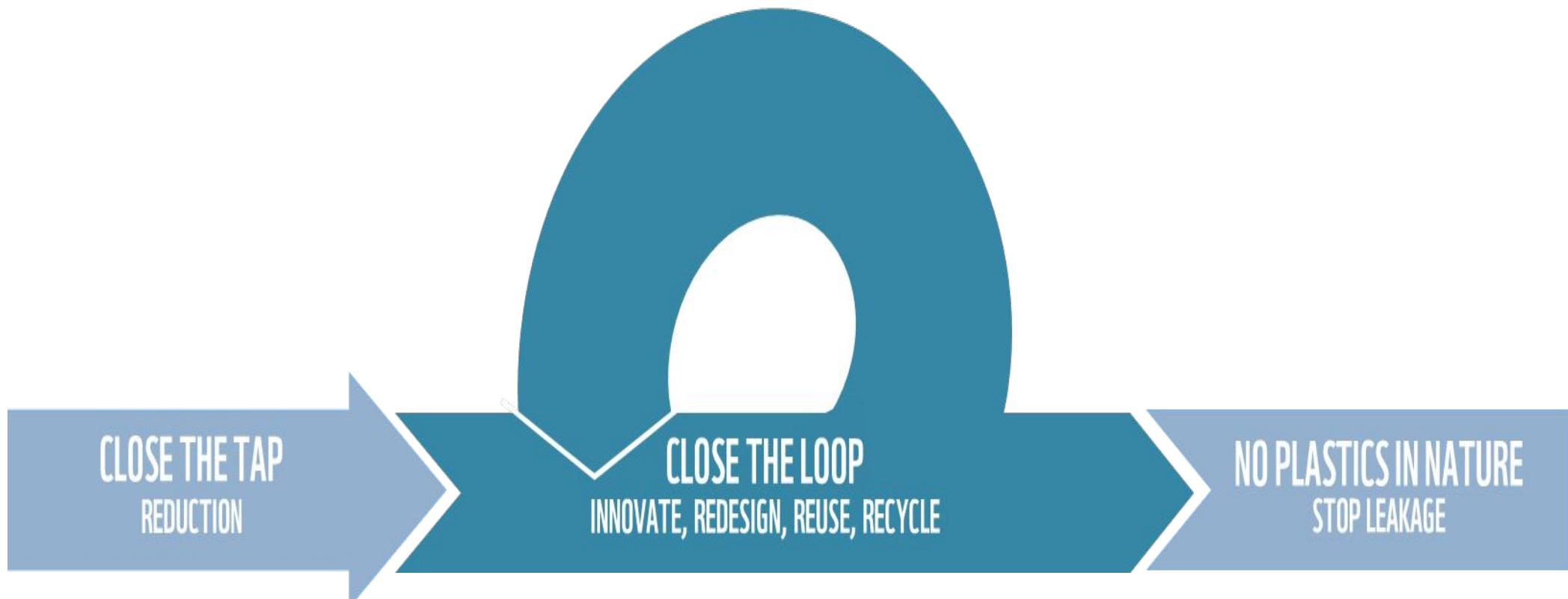
- [2] PlasticsEurope, Conversio Market & Strategy GmbH, and myCEPPI, "[Plastics – the Facts 2017: An Analysis of European Plastics Production, Demand and Waste Data](#)";  
[3] Silpa Kaza et al., "[What a Waste 2.0 : A Global Snapshot of Solid Waste Management to 2050](#)";



# Approccio di Sistema circolare

*La nostra missione è la transizione ad un'economia circolare, dove imballaggi e rifiuti non lasciano alcun impatto sul nostro pianeta, dove i materiali vengono riciclati e riutilizzati al massimo delle loro potenzialità, dove le risorse sono gestite in modo responsabile e gli impatti negativi vengono attivamente evitati.*

*WWF Whitepaper - Moving from a Linear to a Circular Economy, 25 February 2021*



## PSC nel Mondo e nel Mediterraneo

1

**Global Plastic Smart  
Cities movement**



31 città hanno aderito,  
altre 16 coming soon  
(Focus iniziale: SE Asia)

**Obiettivo:**  
1.000 città entro il 2030.

2

**Attività nel  
Mediterraneo**



10 città e aree  
turistiche in 6 paesi  
Italia, Francia, Croazia, Turchia,  
Marocco e Tunisia

**Obiettivo:**  
25 città entro il 2022.

0031 Plastic Smart Cities, on our way to 1000



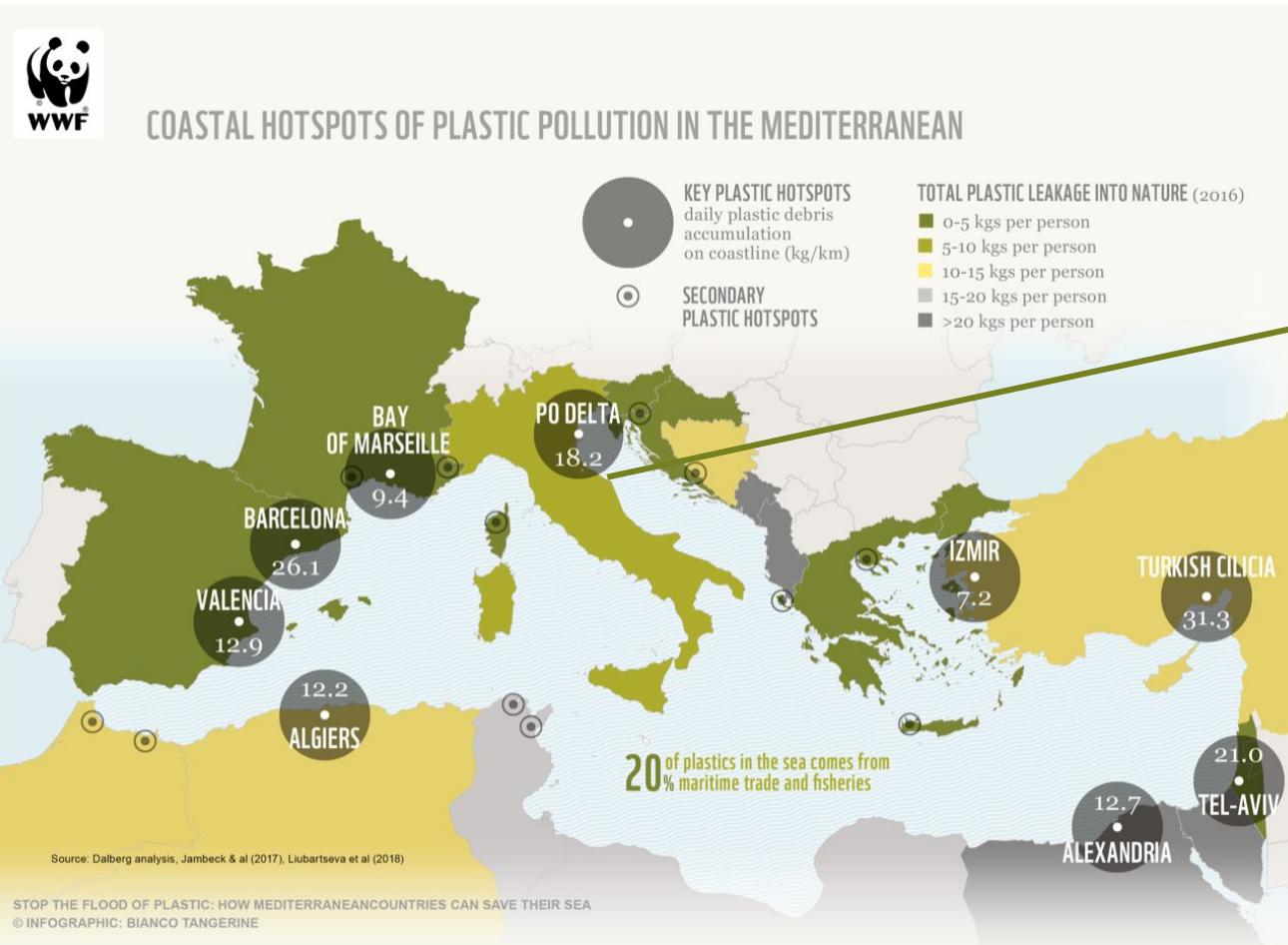


# Mediterraneo: 0.57 milioni di tonnelate di plastica/anno -

**l'equivalente di 33,800 bottiglie  
di plastica ogni minuto**  
(Stop the flood of Plastic – WWF 2019)



# Stop the flood of Plastic – WWF 2019



**PO DELTA & VENICE**  
**1,884 tons**  
annual coastline pollution  
**18,2 kg/km**  
daily plastic debris flux

Link al report

[https://wwfeu.awsassets.panda.org/downloads/06062019\\_wwf\\_italy\\_guidebook.pdf](https://wwfeu.awsassets.panda.org/downloads/06062019_wwf_italy_guidebook.pdf)

# Plastic Smart Cities nel Mediterraneo



**Croatia**

Dubrovnik & Trogir

**France**

Nice

**Italy**

Venice

**Turkey**

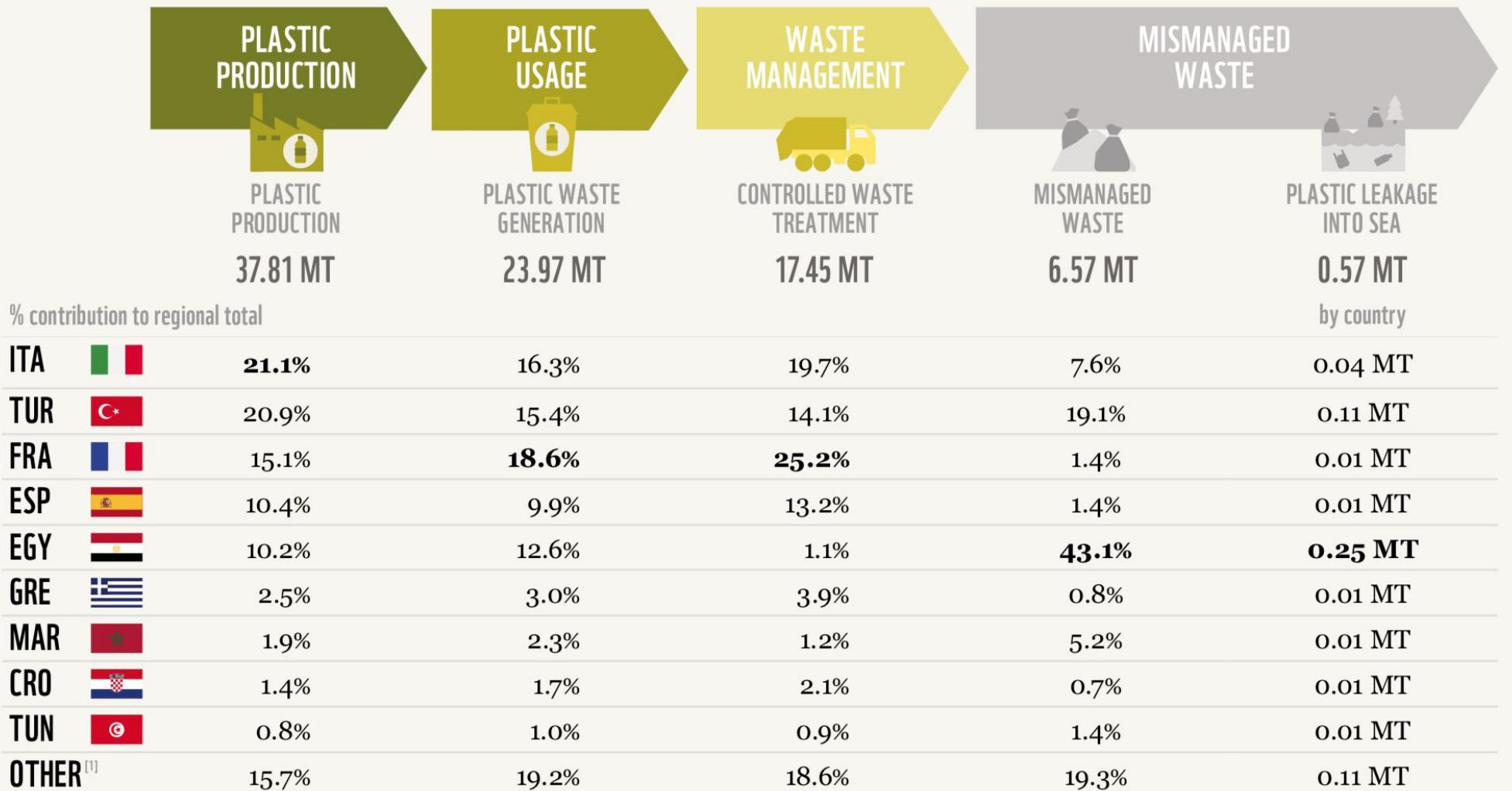
Izmir

**Tunisia**

Hammamet, Monastir &  
Gabes, Nabeul

**Marocco**

Tangier



[1] Include total percentage contribution of across each value chain segment of remaining 13 mediterranean countries

Source: Dalberg analysis, Jambeck et al. (2017), Liubartseva et al. (2018)

44

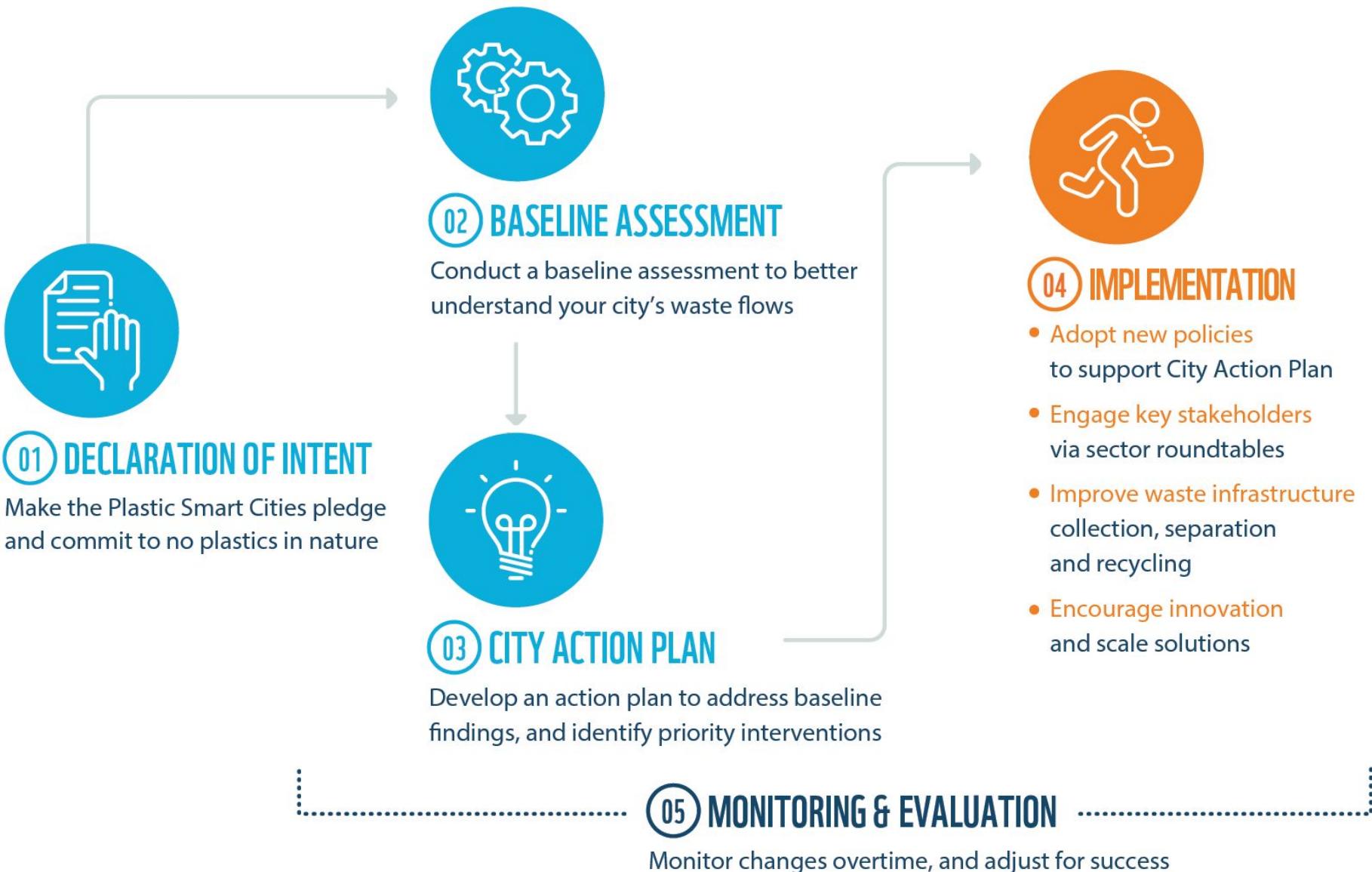
tonnellate  
di plastica al giorno.



# Come si diventa una Plastic Smart City?

## Dalla Dichiarazione d'Intenti all'Implementazione

PLASTIC  
SMARTCITIES



# Temi ed Attività Plastic Smart Cities

Key Themes	Reduction and reuse at scale	Affordable waste collection	Recycling plastics & processing organics economically	Improving landfill & waste picker inclusion
Phase 1: Planning	1. City Prioritization 2. Plastic Smart Cities Commitment 3. Scoping / Waste Flow Diagram 4. City Action & Monitoring Plan			
Phase 2: Implementing the City Action Plan	6. Policy Interventions 7. Facilitate Sector Roundtables 8. Build Local Collection, Separation and Recycling Infrastructure 9. Identify And Scale Entrepreneurial Solutions			
Metrics	% of plastic waste per capita per day	MSW collected over total MSW generated	% of plastics recovered	% of waste managed in controlled recovery and disposal facilities

5. Monitoring & Evaluation

## STEP CHIAVE

**Sviluppo e firma dichiarazione d'intenti (Declaration of Intent)**

**Raccolta e analisi dati/report ed individuazione eventuali gap per lo sviluppo della baseline**

**Sviluppo piano d'azione e monitoraggio**

Identificazione Progetto pilota all'interno di un'area ben definita (con target di riduzione del 30% rispetto alla baseline entro 2 anni)

Politiche, servizi e finanziamenti per il coinvolgimento di settori chiave e cittadini

Coinvolgimento stakeholder locali nel co-design di attività misurabili a livello annuale

**Monitoraggio progresso e condivisione risultati e aggiornamenti su [www.plasticsmartcities.org](http://www.plasticsmartcities.org)**

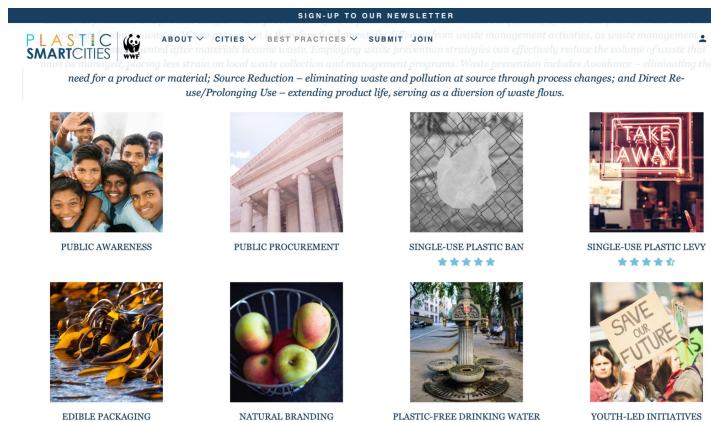
## Piattaforma Online Plastic Smart Cities

Consente lo scambio di conoscenze tra città condividendo le migliori pratiche sviluppate

[www.plasticsmarcities.org](http://www.plasticsmarcities.org)

### Best Practices

- 89 distinte in 14 categorie (to date)
- Best Practices si allineano con i UN Sustainable Development Goals





[www.plasticsmartcities.org](http://www.plasticsmartcities.org)

SIGN-UP TO JOIN OUR NEXT WEBINAR

English

ABOUT ▾ METHODOLOGY KNOWLEDGE HUB ▾ SMART CITIES SUBMIT BEST PRACTICE

HOME > Products > AMSTERDAM CLEAN WATER INITIATIVE



## AMSTERDAM CLEAN WATER INITIATIVE

No reviews

The Amsterdam Clean Water Initiative seeks to keep waterways clean in and around the City of Amsterdam.

**TARGET USERS:** Individuals, Businesses, Industry, Government

**COSTS:** Project specific

**KEY CONSIDERATIONS:** 3-year initiative concludes in 2019, current City activities will now be part of the Plastic SmartCities Initiative.

**MORE INFORMATION:** [www.amsterdamcleanwater.nl](http://www.amsterdamcleanwater.nl)

**CONTACT:** See contact form at [www.amsterdamcleanwater.nl](http://www.amsterdamcleanwater.nl)

---

Share: [Twitter](#) [Facebook](#) [Instagram](#) [Google+](#) [LinkedIn](#)

Collections: GREEN & BLUE INFRASTRUCTURE, INDIVIDUALS, POLICY, TOURISM, HOSPITALITY & RECREATION, TRANSPORTATION & PORTS, WASTE MANAGEMENT



# Canali di comunicazione

- Web Platform at [www.PlasticSmartCities.org](http://www.PlasticSmartCities.org)
- Newsletter/Mailing list:  
<https://plasticsmartcities.org/apps/seguno/subscribe>
- Social Media  
#PlasticSmartCities #NoPlasticInNature #StopPlasticPollution



# Domande & Commenti

