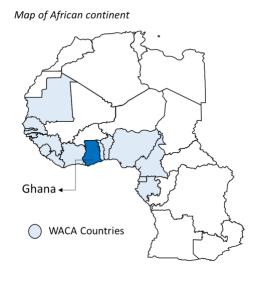
### Ghana



| Indicator   | Data       |
|---|------------|
| Population, 2019 (no.)                                    | 30,417,856 |
| Population density, 2018 (people per sq. km of land area) | 130.82     |
| Coastal population, 2014 (no.) <sup>136</sup>             | 7,727,702  |
| Share of people living in urban areas, 2019 (%)           | 56.7       |
| Total MSW generated, 2016 (tons/year) <sup>137</sup>      | 3,538,275  |

#### **Socioeconomic Profile**

Ghana is a lower-middle-income country in West Africa bordered by Côte d'Ivoire, Burkina Faso, and Togo. As the second-largest economy in the Economic Community of West African States, <sup>138</sup> West Africa's regional body, Ghana's economy is driven by its three main export commodities—oil, cocoa, and gold. <sup>139</sup> Ghana comprises 16 administrative regions <sup>140</sup> and runs a unitary presidential republic system with a parliament.

In 2019, Ghana recorded an overall GDP (purchasing power parity) of approximately \$165 billion and a GDP (purchasing power parity) per capita of \$5,413.<sup>141,142</sup> With an area of 238,533 km<sup>2</sup>, it has a population of 30,417,856 (2019) and a population density of 130.82 people per km<sup>2</sup> (2018).<sup>143</sup> Due to increasing urbanization, majority of Ghana's population resides in urban areas—56.7 percent in 2019.<sup>144</sup> Just under

<sup>&</sup>lt;sup>136</sup> Jambeck et al., "Plastic Waste Inputs from Land into the Ocean."

<sup>&</sup>lt;sup>137</sup> Kaza, Silpa, Lisa Yao, Perinaz Bhada-Tata, and Frank Van Woerden. 2018. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank

<sup>&</sup>lt;sup>138</sup> Carmen Torres and Jeske van Seters, "Overview of Trade and Barriers to Trade in West Africa: Insights in Political Economy Dynamics, with Particular Focus on Agricultural and Food Trade," 2016, https://www.tralac.org/images/docs/10274/overview-of-trade-and-barriers-to-trade-in-west-africa-insights-in-political-economy-dynamics-agricultural-trade-ecdpm-july-2016.pdf.

<sup>&</sup>lt;sup>139</sup> World Bank Group, "Ghana—Overview," 2021, https://www.worldbank.org/en/country/Ghana/overview#1.

<sup>&</sup>lt;sup>140</sup> City Population, "Ghana: Regions, Major Cities & Urban Localities: Population Statistics in Maps and Charts," retrieved October 6, 2020, <a href="https://www.citypopulation.de/en/ghana/cities/">https://www.citypopulation.de/en/ghana/cities/</a>.

<sup>&</sup>lt;sup>141</sup> GDP, PPP (constant 2017 international \$) and GDP per capita, PPP (constant 2017 international \$).

<sup>&</sup>lt;sup>142</sup> World Bank Group, "World Development Indicators," 2020.

<sup>&</sup>lt;sup>143</sup> Ibid.

<sup>144</sup> Ibid.

8 million Ghanaians reside in coastal areas (2014),<sup>145</sup> particularly in important enclaves such as Accra, the capital, Tema, and Takoradi.

## **Plastic Industry and Ecosystem**

In 2018 and 2019, Ghana had no domestic resin production. Its conversion industry processed 262 kt of resin (158 kt PE, 53 kt PP, 51 kt PET) in 2018 and 205 kt of resin (135 kt PE, 15 kt PP, 55 kt PET) in 2019. Similar to other West African countries, Ghana is a net importer of plastics. In 2019, 233 million kg of plastics were imported into the country, with PE and PVC accounting for about 86 percent of the imports. Comparatively, only 1,041,278 kg of plastics were exported from Ghana that same year, 90 percent of which were classified as PE and scrap plastics. 147

As Ghana lacks a well-developed downstream oil and gas sector, plastics are imported into Ghana as either virgin pellets or finished products, mainly from Asia and Europe. The imported virgin pellets feed Ghana's burgeoning domestic plastics industry. With at least 120 manufacturers operating in the country, the local plastics industry produces semi-finished goods, such as bottles, plastic bags, and plastic film for water sachets. According to the Ghana Plastics Manufacturers Association, the industry produces 27,000 million tons per annum of flexible packaging for domestic consumption by multinational corporations and informal microenterprises. Furthermore, the association also highlights that PET bottle production in Ghana stands at 68,000 million tons per year. 153

### **Solid Waste Management**

Ghana generates 0.45 kg of MSW per capita per day, amounting to an overall daily MSW generation of 9.7 million kg.<sup>154</sup> About 81 percent of MSW generated in Ghana is inadequately managed.<sup>155</sup> Plastic waste accounts for just below 5 percent of MSW arisings<sup>156</sup> with a daily generation rate of about 743,000 kg.

Currently, there are only 25 plastic recycling companies operating in Ghana, with a combined processing capacity of 320 tons of flexible plastic per day, mainly sourced from water sachets.<sup>157</sup> Though a few formal waste management companies recover plastic waste for export as scrap, <sup>158</sup> more than 95 percent of

<sup>&</sup>lt;sup>145</sup> Jambeck et al., "Plastic Waste Inputs from Land into the Ocean."

<sup>&</sup>lt;sup>146</sup> UN Comtrade, "UN Comtrade Database," 2019.

<sup>147</sup> Ibid

<sup>&</sup>lt;sup>148</sup> World Bank, *Ghana: Country Environmental Analysis* (Washington, DC: World Bank, 2020), <a href="http://documents1.worldbank.org/curated/en/419871588578973802/pdf/Ghana-Country-Environmental-Analysis.pdf">http://documents1.worldbank.org/curated/en/419871588578973802/pdf/Ghana-Country-Environmental-Analysis.pdf</a>.

<sup>149</sup> Ibid.

<sup>&</sup>lt;sup>150</sup> GEF (Global Environment Facility), *Establishing a Circular Economy Framework for the Plastics Sector in Ghana* (Washington, DC: GEF, 2019), <a href="https://www.thegef.org/sites/default/files/web-documents/10401">https://www.thegef.org/sites/default/files/web-documents/10401</a> MFA PIF.pdf.

<sup>&</sup>lt;sup>151</sup> World Bank, Ghana: Country Environmental Analysis.

<sup>152</sup> Ibid.

<sup>&</sup>lt;sup>153</sup> Trinomics, *Circular Economy in Africa-EU Cooperation: Country Report for Ghana* (Brussels: European Commission, 2020), http://trinomics.eu/wp-content/uploads/2020/12/Country-Report-Ghana Final 20122020.pdf.

<sup>&</sup>lt;sup>154</sup> Kaza, Silpa, Lisa Yao, Perinaz Bhada-Tata, and Frank Van Woerden. 2018. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. Urban Development Series. Washington, DC: World Bank

<sup>&</sup>lt;sup>155</sup> Jambeck et al., "Plastic Waste Inputs from Land into the Ocean."

<sup>156</sup> Ihid

<sup>&</sup>lt;sup>157</sup> Trinomics, *Circular Economy in Africa-EU Cooperation*.

<sup>&</sup>lt;sup>158</sup> GEF, Establishing a Circular Economy Framework.

recovered plastics in Ghana is captured by informal waste operators.<sup>159</sup> The recovered plastics, dominated by thin-film plastic sachets for drinking water, are supplied to local reprocessors that produce shopping bags.<sup>160</sup> Only 2 percent of PET bottles are recycled in Ghana.<sup>161</sup>

#### Legislation, Policies, and Other Initiatives

The government ministries responsible for municipal waste management in Ghana are the Ministry of Sanitation and Water Resources and the Ministry of Environment, Science, Technology and Innovation. <sup>162</sup> Currently, waste management in Ghana is driven by the following:

- Environmental Sanitation Policy, 2009: This policy emphasizes the promotion of the 4Rs for waste management in Ghana—reduction, reuse, recycling, and recovery. 163
- National Environmental Sanitation Strategy and Action Plan, 2010: This government initiative highlights the strategies and related action plans for promoting solid waste management in Ghana.<sup>164</sup>

To facilitate funding for plastic waste management in Ghana, the government applies an environmental excise tax on plastic and plastic products. According to the Customs and Excise (Duties and Other Taxes) (Amendment) Act, 2013, <sup>165</sup> a 10 percent tax is applied on imported plastics and plastic products, with at least half of the revenue accrued meant to be directed toward the funding of plastics recycling and the production of plastic waste bins and bags and biodegradable plastics. However, the funds generated from the tax have yet to be disbursed to the local plastics recycling sector due to the absence of an approved fund management authority. <sup>166</sup>

In 2019, Ghana signed up to the Global Plastic Action Partnership and set up a National Plastic Action Partnership It is currently developing a National Plastic Management Policy. <sup>167</sup> Ghana's EPR (Hazardous and Electronic Waste Control and Management Act 2017), introduced in 2016, covers plastics embedded in waste electrical and electronic equipment.

<sup>&</sup>lt;sup>159</sup> World Bank, Ghana: Country Environmental Analysis.

<sup>160</sup> Ibid

<sup>&</sup>lt;sup>161</sup> Trinomics, *Circular Economy in Africa-EU Cooperation*.

Netherlands Enterprise Agency, "Market Survey Waste and Circular Economy in Ghana," 2019, https://www.rvo.nl/sites/default/files/2019/08/Ghana-Market-Survey-Waste-Circular-Economy.pdf.

<sup>&</sup>lt;sup>163</sup> Chatham House, "Policies."

<sup>164</sup> Ibid.

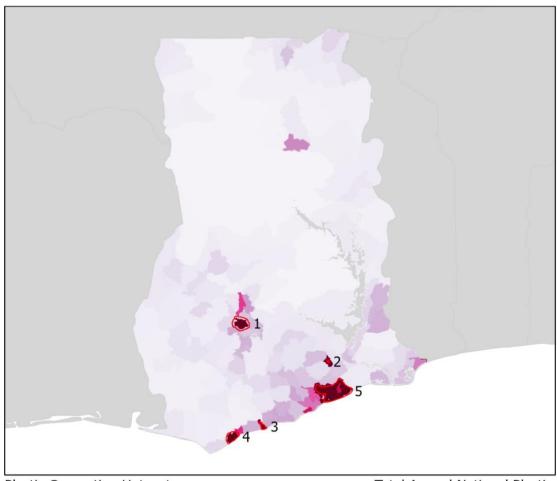
<sup>&</sup>lt;sup>165</sup> Parliament of the Republic of Ghana, "Customs and Excise (Duties and Other Taxes) (Amendment) Act 2013," 2013,

 $<sup>\</sup>frac{\text{http://www.odekro.org/Images/Uploads/Customs\%20and\%20Excise\%20Duties\%20(Amendment)\%20Act\%202013.}{\text{pdf.}}$ 

<sup>&</sup>lt;sup>166</sup> Trinomics, *Circular Economy in Africa-EU Cooperation*.

<sup>&</sup>lt;sup>167</sup> Ibid.

# Plastic Waste in Ghana



Hotspot Extent

Plastic Generation Hotspots

| ID | Locale     | Rank | Plastic Waste (kt) | Population | Area (km^2) |
|----|------------|------|--------------------|------------|-------------|
| 1  | Kumasi     | 15   | 29.752564          | 3349684    | 513.217511  |
| 2  | Koforidua  | 66   | 0.137374           | 15466      | 10.226061   |
| 3  | Cape Coast | 52   | 1.183776           | 133275     | 70.110948   |
| 4  | Sekondi    | 34   | 7.788452           | 876861     | 288.862334  |
| 5  | Accra      | 9    | 39.661423          | 4465270    | 1256.748394 |

West Africa Regional Gap Analysis: Plastics Circularity

Total Annual National Plastic Waste Generation: 271.35 kt

# Location in Region



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