



# ENVIRONMENTAL STATISTICS COMPENDIUM

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# TABLE OF CONTENTS

	Page
FOREWORD	1
BACKGROUND	2
SYMBOLS	4
STAKEHOLDERS	5
<b>Chapter 1</b>	
<b>POPULATION AND HOUSEHOLDS</b>	<b>8</b>
Table 1.1 Population and Population Density, 2011 – 2015	13
Chart 1.1 Population Density, 2011 – 2015	13
Chart 1.2 Percentage of Distribution of Households by Type of Dwelling and District, 2011	14
Table 1.2 Number of Households by Type of Tenure and District, 2011	15
Table 1.3 Number of Household by Type of Tenure and Dwelling, 2011	15
Table 1.4 Number of Households by Type of Materials of Outer Walls, 2011	16
Table 1.5 Number of Households by Main Material of Outer Wall, 2011	17
Table 1.6 Number of Households by Type of Main Outer Roof Materials, 2011	18
Table 1.7 Number of Households by Type of Dwelling and Type of Roof, 2011	18
Table 1.8 Number of Households by Number of Rooms and Bedrooms, 2011	19
Chart 1.3 Percentage Distribution of Households by Number of Bedrooms, 2011	19
Table 1.9 Average Household Size by District, 1992, 2001 and 2011	20
<b>Chapter 2</b>	
<b>TOURISM</b>	<b>22</b>
Table 2.1 Tourist, Cruise Ship Arrivals and Average tourists night spent, 2011 – 2015	26
Chart 2.1 Tourist Arrivals to Anguilla, 2011 – 2015	26
Chart 2.2 Tourism Density Ratio, 2011 – 2015	27
Chart 2.3 Tourist Penetration Ratio	28
Chart 2.4 Air Passengers Arrivals and Total Visitors Arrivals, 2011 – 2015	29
Table 2.2 Total Visitors by Country of Origin, 2011 – 2015	30
Table 2.3 Estimated Electricity Consumption by Tourist Arrivals: 2011 – 2015	30

<b>Chapter 3</b>	<b>ENVIRONMENTAL HEALTH</b>	<b>31</b>
Table 3.1 Reported Cases of Environmentally-Related Diseases by Sex: 2011 – 2015		36
Chart 3.1 Number of Reported Cases of Environmentally –Related Diseases by Cause: 2011 – 2015		37
Table 3.2 Total Number of Inches of Rainfall: 2011 – 2015		38
Table 3.3 Mean Daily Maximum, Minimum and Daily Air Temperature: 2011 – 2015		39
Table 3.4 Mean Relative Humidity: 2012 – 2015		39
<b>Chapter 4</b>	<b>NATURAL DISASTERS</b>	<b>41</b>
Table 4.1 Natural Disasters: 2011 – 2015		46
Table 4.2 Incidences of Fire by Type: 2011 – 2015		47
Chart 4.2 Incidences of Fire by Type: 2011 – 2015		47
Table 4.3 Storms Affecting Anguilla: 1950 – 2015		48
<b>Chapter 5</b>	<b>ENERGY, MINERALS AND TRANSPORT</b>	<b>50</b>
Table 5.1 Value of Imported Fuel by Type: 2011 – 2015		54
Table 5.2 Electricity Consumption by Type of Consumer: 2011 – 2015		54
Table 5.3 Electricity Consumption: 2011 – 2015		55
Table 5.4 New Registered Road Vehicles: 2011 – 2015		55
Chart 5.4 New Registered Road Vehicles: 2011 – 2015		56
<b>Chapter 6</b>	<b>COASTAL AND MARINE RESOURCES</b>	<b>58</b>
Table 6.1 Total and Protected Marine Area: 2015		61

**Chapter 7**

**BIODIVERSITY**

**63**

**Table 7.1 Protected Areas, 2015**

**66**

**Chapter 8**

**WASTE**

**68**

**Table 8.1 Generation of Waste by Source, 2011 – 2015**

**72**

**Chart 8.1 Generation of Waste by Source, 2011-2014**

**72**

**Table 8.2 Generation of Waste by Category, 2011 – 2014**

**73**

**Chart 8.2 Generation of Waste by Category, 2011 – 2014**

**73**

## FOREWORD

The Anguilla Statistics Department (ASD) is pleased to release its first issue of the Environmental Statistics Compendium 2015, which directly supports the mandate of the Department to collect, compile, analyse, abstract and publish statistical information relative to commercial, industrial, social, economic and general activities and conditions of the people who are the inhabitant of Anguilla. This publication illustrates the compilation of existing data, sourced from various stakeholders – the Anguilla Interagency Working Environment Group (AIWEG). The release of this report also supports the efforts of both CARICOM and United Nations Statistics Division (UNSD) in response to the need of strengthening environmental statistics as well as monitoring the Sustainable Development Goals (SDG).

This publication provides the reader with all data relating to the environment available in Anguilla in one place. The data provided will also help to strengthen the understanding and increase awareness of the issues that may be impacting the environment of Anguilla.

The Environmental Statistics Compendium is structured into twelve (12) sections which include:

- 1 Population and Housing
- 2 Tourism
- 3 Environmental Health
- 4 Natural Disasters
- 5 Energy, Minerals and Transport
- 6 Agriculture and Land Use: No data available
- 7 Coastal and Marine Resources
- 8 Biodiversity
- 9 Waste
- 10 Water: No data available
- 11 Forestry: No data available
- 12 Air: No data available

The data in this publication primarily reflects the totals for the period 2011 to 2015. Future publications will be annually issued. The next publication will include data covering the period 2016 to 2020.

The ASD wishes to acknowledge the continued support and partnership of its stakeholders, in particular the AIWEG members who have diligently remained committed to the provision of the statistical data required to compile and produce this report.

**Lori-Rae Alleyne Franklin**  
**Chief Statistician**  
**Anguilla Statistics Department**  
**April 2023**

## BACKGROUND

There is an array of statistics and information that directly or indirectly guide our daily decision-making process in Anguillan society. Environmental statistics is one such set of information, as it makes the connection between human well-being and the use of natural resources. The measuring and monitoring of environmental data is the foundation to understanding our progress towards the 2030 Sustainable Development Goals (SDGs). However, there has been significant challenges especially for developing countries like Anguilla in coordinating resources to track, measure and monitor the use of environmental resources. The presentation of this inaugural Environmental Compendium signals progress in this core statistical sub-field, but also highlights the technical and operational challenges faced in collecting, compiling and synthesizing environmental data for Anguilla.

In 2008, the ASD drafted an action plan to produce the first Environmental Statistics Compendium for release in 2009, however, resources and change in focus significantly delayed this publication. It was envisioned that this publication would present quality and comprehensive environmental data that provided a complete statistical picture of the state of the nation for local, regional and international purposes. Stemming from the drive to monitor Goal 7 of the Millennium Development Goals (MDGs), which focused on moving developing countries towards environmental sustainability, the ASD progressively prioritized an assessment of the environmental situation in the country. The specific objectives that guided this exercise were:

- Collate and produce first compendium of environmental statistics by June 2009.
- Publish first compendium of environmental statistics by June 2009.
- Collect, collate and analyse data and information on Population and Households; Tourism; Environmental Health; Natural Disasters; Energy and Minerals; Land Use and Agriculture; Coastal and Marine Resources; Biodiversity; Forest; Air; Waste and Water as they relate to the environment.
- Collect, collate and analyse data and information that informs decisions on the management of environmental resources.
- Provide technical support, where needed, to the producers of environmental data to ensure that the production of high quality data is achieved and maintained.
- Monitor and assess the processes used to produce environmental data by producers and recommend improvements where necessary.
- Communicate to the producers, as well as users, the importance of having good, high quality and comprehensive environmental data.
- Organization by March 2009 procedures from the initial collection of data for the first compendium.

Though the primary goal of releasing the first Environmental Statistics Compendium was not achieved in 2009; what resulted from the work done during this time forms the foundation of the present publication. The major achievements of the 2008 - 2009 efforts, saw renewed coordination of the AIWEG, and a more contextual understanding of the data collection and reporting mechanisms that exist in Anguilla's statistical system in respect to environmental indicators. It was also realized that there was not necessarily a complete lack of environmental data but limitations in the country's capacities to adequately transform data within different ministries, departments and agencies on a consistent basis to satisfy the needs of the statistical

system. It is by virtue of these understandings and achievements that the first Environmental Compendium which reports on data from 2011 – 2015 is now presented.

The 2011 - 2015 period is an important statistical marker as it provides data on the last period of the MDGs and therefore gives a sense of the issues affecting Anguilla's environment leading into the post-2015 development era. This information signals the establishment and development of environment statistics in Anguilla. It also marks the start of an incremental process to produce a comprehensive set of environment statistics to support evidence-based policymaking in the country.

The ASD therefore aims for the next Environmental Compendium to cover the first five years of the SDGs (2016 - 2020). With the assistance of our valued internal and external stakeholders we will continue working towards the production of useful and responsive environmental statistics on a consistent basis to meet the demands of a wide array of users.



## SYMBOLS

-	Data is unavailable	KWh	Kilowatt-hour
N.A.	Not applicable	mio m <sup>3</sup> /y	Million cubic metres per year
D.K.	Do not know	mT	Metric tonnes
HHL D	Household	No.	Number
0	Less than half of the unit was specified	µg/m <sup>3</sup>	Microgram
'000	Thousands	NO <sub>2</sub>	Nitrogen Dioxide
°	Degrees	SO <sub>2</sub>	Sulfur Dioxide
%	Percent	ppb	Parts per billion
\$	Eastern Caribbean Dollar	TSP	Total Suspended Particles
F	Fahrenheit	PM <sub>10</sub> /PM <sub>2.5</sub>	Fine Particulate Matter
ha	Hectare	µg/nm <sup>3</sup>	Milligrams per cubic meter
Kg	Kilograms	SDG	Sustainable Development Goals
Km	Kilometre	NTR	Note to Reader
Km <sup>2</sup>	Square kilometre		

## STAKEHOLDERS

- Anguilla Statistics Department (ASD)
- Anguilla Interagency Working Environment Group (AIWEG)
- Anguilla Tourist Board
- Environmental Health Protection
- Department Fisheries & Marine Resources
- Water Corporation of Anguilla formally Water Department
- Department of Environment
- Department of Physical Planning
- Department of Disaster Management
- Environmental Protection Unit
- Immigration Department
- Anguilla National Trust



# **CHAPTER 1**

## **POPULATION & HOUSEHOLDS**



## Goal



## SUSTAINABLE DEVELOPMENT GOALS

**1.4:** By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

### Relevant Indicators

- **1.4.1:** Proportion of population living in households with access to basic services
- **1.4.2:** Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure



## Chapter 1: Population and Households

The indicators of the population and household data seek to examine the housing conditions as well as the population in Anguilla. Calculations in this chapter are based on 91 square miles.

### Population

- In 2015, the projected population of Anguilla was 14,862 persons, a 3.4% increase from the 14,369 projected totals in 2014 (Table 1.1).
- From 2014 to 2015, the projected figures show an increase of five (5) persons per square kilometre (Chart 1.1).

### Households

- Over the past decade 2001 – 2011, home ownership in Anguilla grew by 16.2% (Table 1.2).
- In 2011, majority (2,489) of households that were owned by the population were undivided private houses (Table 1.3).
- A total of 4,735 housing units, 95.9% of the total number had outer walls constructed mainly of concrete/ concrete blocks (Table 1.4).
- The main material of the outer walls of the most households (4, 735) was constructed using concrete or concrete blocks, with an overall percentage change 36.0% between 2001 and 2011 (Table 1.5).
- Dwellings that were 'part of private house' had the greater proportion of flat roofs (70.5%) followed by 'flats/apartments' with (68.0%) (Table 1.7).
- Under 50% (2,364) of the households had 5 or more rooms in the dwelling, while 2,260 had 3 or more bedrooms (Table 1.8).





## DEFINITIONS

**Households by Size of Household** - refers to the number of persons residing in households.

**Average Household Size** - Total Population / Total Number of Households

**Undivided Private House** - A dwelling unit in which one private household resides. This is a stand-alone private dwelling that does not have apartments attached to them.

**Part of a private house** - This is where the living quarters of a household is part of an undivided private house.

**Duplex house/apartment** - A house divided into two living units or residences, usually having separate entrances.

**Flat/apartment** - Any building or portion of a building containing three or more dwelling units, which is designed, built, rented, leased, let, or hired out to be occupied for residential living purposes. These are usually spilt horizontally, side by side although you will tend to find some that are vertically split into an upper and lower apartment.

**Combined dwelling & business** - Use this category where you find a private dwelling located in a building that is also used for non-residential purposes.

**Barracks** - This is housing mainly associated with that for soldiers and police.

**Other** - This category is used for dwellings which do not fit any of the listed categories for the type of dwellings.

**Rent** – This refers to a dwelling being rented for cash, with or without furnishings.

**Lease** – This is an agreement by which the owner of a property rents it for a specified time. This is usually for a long period of time. A lease is a written agreement under which a property owner allows a tenant to use the property for a specified period of time and rent.



**Rent free** - This may not be a common arrangement but you may find situations where it exists. For example a dwelling is supplied with a particular job or where a special family arrangement exists. Exclude those persons whose rent is paid in full for them.

In special cases where a home has been left in a trust for the occupant and outright ownership will not take place until a specified time in the future, do not record the respondent as renting the house, but living there rent free or paying rent, whatever the case may be.

**Other** - This category is used for dwellings which do not fit any of the listed categories for the type tenure of household dwellings.

**Households by Type of Materials of Outer Walls** - The number of households by type of materials of outer walls refers to the construction material of external (outer) walls of the building in which the sets of living quarters are located. If the walls are constructed of more than one type of material, the predominant type of material should be reported. The types distinguished (brick, concrete, wood, adobe and so on) will depend upon the materials most frequently used in the country concerned and on their significance from the point of view of permanency of construction or assessment of durability.

#### **Types of Materials - Walls**

**Wood:** This is applicable where major portion of the outside walls is of wood, wood boards, plywood, etc.

**Concrete:** This is applicable if the major portion of the outside walls is of poured concrete.

**Wood & Concrete:** if the major portions of the outside walls are of wood, wood boards, plywood, etc. and approximately equally of poured concrete.

**Stone:** This applies to buildings where the major portion of the outside walls is of stones, either cut or in their natural state.



## **Types of Materials - Walls Cont'd**

**Brick/Concrete Block:** This applies to buildings where the major portion of the outside walls is of concrete blocks. The walls may be covered with plaster cement.

**Adobe** is unburnt sun-dried bricks or the clay from which such bricks are made.

**Wood/Concrete Block/Galvanize/Stucco:** This applies where the walls are made of wood, concrete block, galvanize and Stucco.

**Makeshift** includes any material that is not normally used for housing e.g. galvanize, cardboard, etc. Some persons may use an old car/truck, for example, to provide shelter or live under a bridge or other unconventional dwelling structure.

**Other:** This includes types of material of construction of outer walls not previously described.

**Type of Material -Roofing** refers to the construction material of the roof.

**Concrete:** the major portion of the roof is of poured concrete.

**Sheet metal (zinc, aluminium, galvanized):** the major portion of the roof is of metal such as zinc, steel, tin, etc.

**Asphalt Shingle:** the major portion of the roof is of metal such as zinc, steel, tin, etc.

**Wood Shingle:** the major portion of the roof is of wood, wood boards, plywood, etc.

**Other Shingle:** This includes any other type of shingle.

**Tile:** the major portion of the roof is of tile.

**Makeshift:** any unconventional material such as cardboard, the roofs of cars, flattened metal drums, discarded sheets of metal etc.



### **Sources**

- Model Enumerator's Manual of the CARICOM Common Census Questionnaires of the 2010 Population and Housing Census, CARICOM Secretariat,
- United Nations Principles and Recommendations for Population and Housing Censuses, Revision 2 (2008) para. 5.525),
- Anguilla Population and Housing Census Enumerator's Manual 2011.



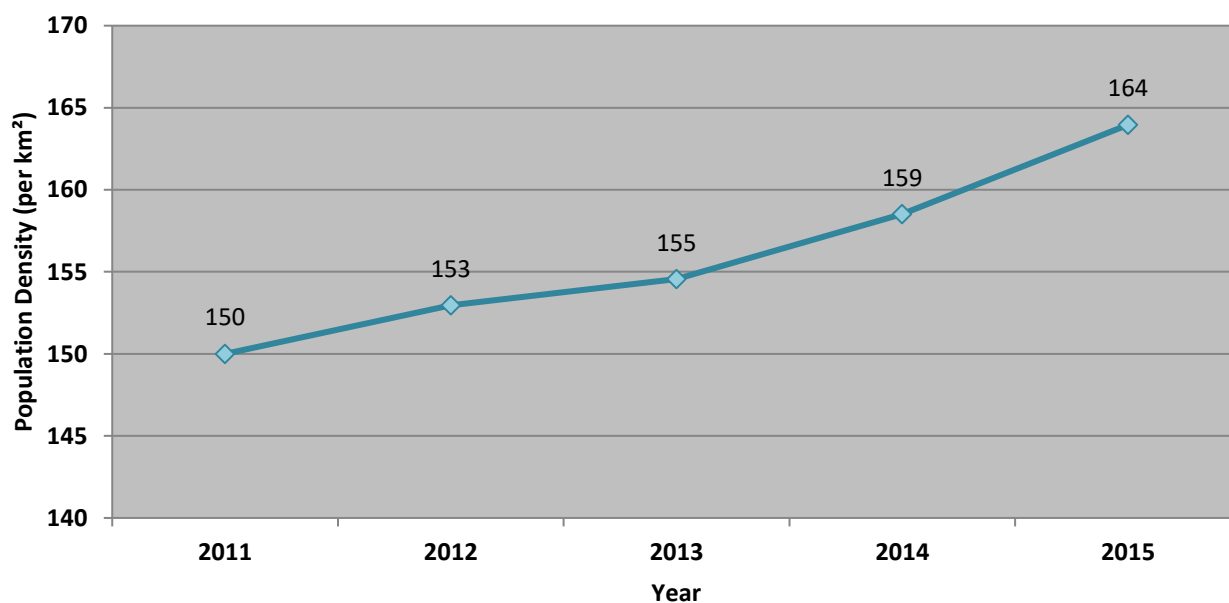
**Table 1.1**  
**Population and Population Density, 2011 – 2015**

<b>Year</b>	<b>Population</b>	<b>Population Density (per km<sup>2</sup>)</b>
2011	13,572	150
2012	13,865 <sup>1</sup>	153
2013	14,011 <sup>1</sup>	155
2014	14,369 <sup>1</sup>	159
2015	14,862 <sup>1</sup>	164

Source: Anguilla Statistics Department

Notes: <sup>1</sup>Based on the Anguilla Population Projections 2011 - 2015

**Chart 1.1**  
**Population Density, 2011 - 2015**

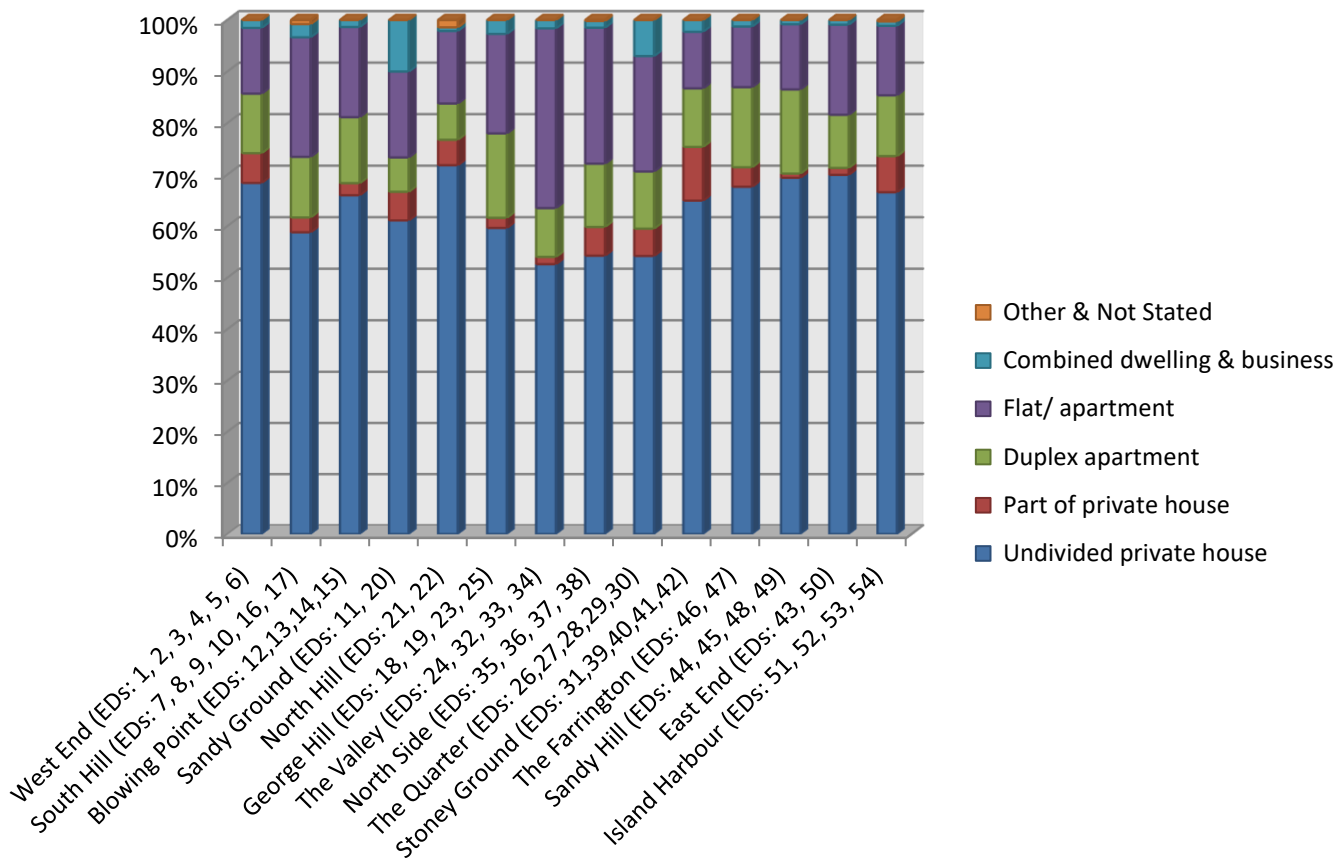


Source: Anguilla Statistics Department

Notes: <sup>1</sup>Based on the Anguilla Population Projections 2011 - 2015



**Chart 1.2**  
**Percentage Distribution of Households by Type of Dwelling and District, 2011**



**Source:** Anguilla Statistics Department

**\*Note:** Other includes barracks, other and not stated

**Table 1.2**  
**Number of Households by Type of Tenure and District, 2011**

District	Type of Tenure					Total
	Owned	Rented	Rent Free	Other	Not Stated	
West End (EDs: 1, 2, 3, 4, 5, 6)	224	87	13	5	0	329
South Hill (EDs: 7, 8, 9, 10, 16, 17)	363	232	29	4	1	629
Blowing Point (EDs: 12,13,14,15)	192	90	12	2	1	297
Sandy Ground (EDs: 11, 20)	60	25	2	3	0	90
North Hill (EDs: 21, 22)	102	34	4	2	0	142
George Hill (EDs: 18, 19, 23, 25)	227	163	17	1	1	409
The Valley (EDs: 24, 32, 33, 34)	245	229	15	4	3	496
North Side (EDs: 35, 36, 37, 38)	290	214	28	3	3	538
The Quarter (EDs: 26,27,28,29,30)	212	189	12	2	0	415
Stoney Ground (EDs: 31,39,40,41,42)	311	181	32	3	1	528
The Farrington (EDs: 46, 47)	154	68	11	1	4	238
Sandy Hill (EDs: 44, 45, 48, 49)	161	64	16	4	0	245
East End (EDs: 43, 50)	139	71	13	0	0	223
Island Harbour (EDs: 51, 52, 53, 54)	229	99	26	0	2	356
<b>Total 2011</b>	<b>2,909</b>	<b>1,746</b>	<b>230</b>	<b>34</b>	<b>16</b>	<b>4,935</b>
<b>% Proportion of total household</b>	<b>58.9</b>	<b>35.4</b>	<b>4.7</b>	<b>0.7</b>	<b>0.3</b>	<b>100.0</b>
<b>Total 2001</b>	<b>2,504</b>	<b>1,120</b>	<b>85</b>	<b>18</b>	<b>3</b>	<b>3,730</b>
<b>% chg. 2011/2001</b>	<b>16.2</b>	<b>55.9</b>	<b>170.6</b>	<b>88.9</b>	<b>433.3</b>	<b>32.3</b>

Source: Anguilla Statistics Department

**Table 1.3**  
**Number of Household by Type of Tenure and Dwelling, 2011**

Dwelling Type	Household Tenure					Total
	Owned	Rented	Rent Free	Other	Not Stated	
Undivided private house	2,489	409	108	24	7	3,037
Part of private house	91	96	24	1	5	217
Duplex apartment	174	381	35	4	0	594
Flat/ apartment	84	816	59	4	3	966
Combined dwelling & business	64	43	4	1	0	112
Other & Not Stated	7	1	0	0	1	9
<b>Total</b>	<b>2,909</b>	<b>1,746</b>	<b>230</b>	<b>34</b>	<b>16</b>	<b>4,935</b>

Source: Anguilla Statistics Department

**Table 1.4**  
**Number of Households by Type of Materials of Outer Walls, 2011**

<b>District</b>	<b>Concrete or Concrete Blocks</b>	<b>Stone &amp; Concrete</b>	<b>Wood Only</b>	<b>Wood &amp; Concrete</b>	<b>Brick</b>	<b>Makeshift</b>	<b>Other</b>	<b>Not Stated</b>	<b>Total</b>
West End (EDs: 1, 2, 3, 4, 5, 6)	313	1	9	6	0	0	0	0	329
South Hill (EDs: 7, 8, 9, 10, 16, 17)	603	0	8	17	0	0	0	1	629
Blowing Point (EDs: 12,13,14,15)	289	0	4	3	0	1	0	0	297
Sandy Ground (EDs: 11, 20)	80	0	6	3	0	0	1	0	90
North Hill (EDs: 21, 22)	129	1	2	10	0	0	0	0	142
George Hill (EDs: 18, 19, 23, 25)	402	1	1	4	0	1	0	0	409
The Valley (EDs: 24, 32, 33, 34)	471	2	11	10	1	0	0	1	496
North Side (EDs: 35, 36, 37, 38)	529	0	3	4	0	0	1	1	538
The Quarter (EDs: 26,27,28,29,30)	392	3	8	11	0	0	0	1	415
Stoney Ground (EDs: 31,39,40,41,42)	500	4	16	8	0	0	0	0	528
The Farrington (EDs: 46, 47)	226	0	5	6	0	0	1	0	238
Sandy Hill (EDs: 44, 45, 48, 49)	237	0	3	5	0	0	0	0	245
East End (EDs: 43, 50)	217	0	2	3	0	0	0	1	223
Island Harbour (EDs: 51, 52, 53, 54)	347	2	4	1	0	0	1	1	356
<b>Total</b>	<b>4,735</b>	<b>14</b>	<b>82</b>	<b>91</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>4,935</b>

**Source:** Anguilla Population and Housing Census 2011

**Table 1.5**  
**Number of Households by Main Material of Outer Wall, 2011**

Material of the Outer Walls	2001		2011		Change 2011/2001	
	No. of Housing Units	Proportion of Total	No. of Housing Units	Proportion of Total	Absolute change	% change
Concrete or Concrete Blocks	3,482	93.4%	4,735	95.9%	1,253	36.0
Stone & Concrete	20	0.5%	14	0.3%	-6	-30.0
Wood Only	101	2.7%	82	1.7%	-19	-18.8
Wood & Concrete	98	2.6%	91	1.8%	-7	-7.1
Other	8	0.2%	7	0.1%	-1	-12.5
Not Stated	21	0.6%	6	0.1%	-15	-71.4
<b>Total</b>	<b>3,730</b>	<b>100%</b>	<b>4,935</b>	<b>100%</b>	<b>1,205</b>	<b>32.3</b>

**Source:** Anguilla Population and Housing Census 2011

**Table 1.6**  
**Number of Households by Type of Main Outer Roof Materials, 2011**

District	Concrete	Sheet Material	Asphalt Shingles	Wood Shingles	Other	Not Stated	Total
West End (EDs: 1, 2, 3, 4, 5, 6)	285	30	1	7	5	0	328
South Hill (EDs: 7, 8, 9, 10, 16, 17)	559	48	2	14	3	3	629
Blowing Point (EDs: 12,13,14,15)	274	17	1	4	0	1	297
Sandy Ground (EDs: 11, 20)	58	30	0	1	1	0	90
North Hill (EDs: 21, 22)	118	10	0	13	1	0	142
George Hill (EDs: 18, 19, 23, 25)	367	30	3	3	6	0	409
The Valley (EDs: 24, 32, 33, 34)	382	93	1	10	8	2	496
North Side (EDs: 35, 36, 37, 38)	455	65	2	5	10	1	538
The Quarter (EDs: 26,27,28,29,30)	335	64	6	9	0	1	415
Stoney Ground (EDs: 31,39,40,41,42)	457	58	1	10	2	1	529
The Farrington (EDs: 46, 47)	186	35	1	14	2	0	238
Sandy Hill (EDs: 44, 45, 48, 49)	192	37	0	13	3	0	245
East End (EDs: 43, 50)	177	33	0	11	1	1	223
Island Harbour (EDs: 51, 52, 53, 54)	317	25	4	7	2	1	356
<b>Total</b>	<b>4,162</b>	<b>575</b>	<b>22</b>	<b>121</b>	<b>44</b>	<b>11</b>	<b>4,935</b>

Source: Anguilla Population and Housing Census 2011

**Table 1.7**  
**Number of Households by Type of Dwelling and Type of Roof, 2011**

Type of Dwelling	Type of Roof			Total
	Pitched	Flat	Not Stated	
Undivided private household	1,016	1,987	34	3,037
Part of private house	61	153	3	217
Duplex apartment	214	369	11	594
Flat/Apartment	283	657	26	966
Combined dwelling & business	48	62	2	112
Other & Not Stated	3	3	3	9
<b>Total</b>	<b>1,625</b>	<b>3,231</b>	<b>79</b>	<b>4,935</b>

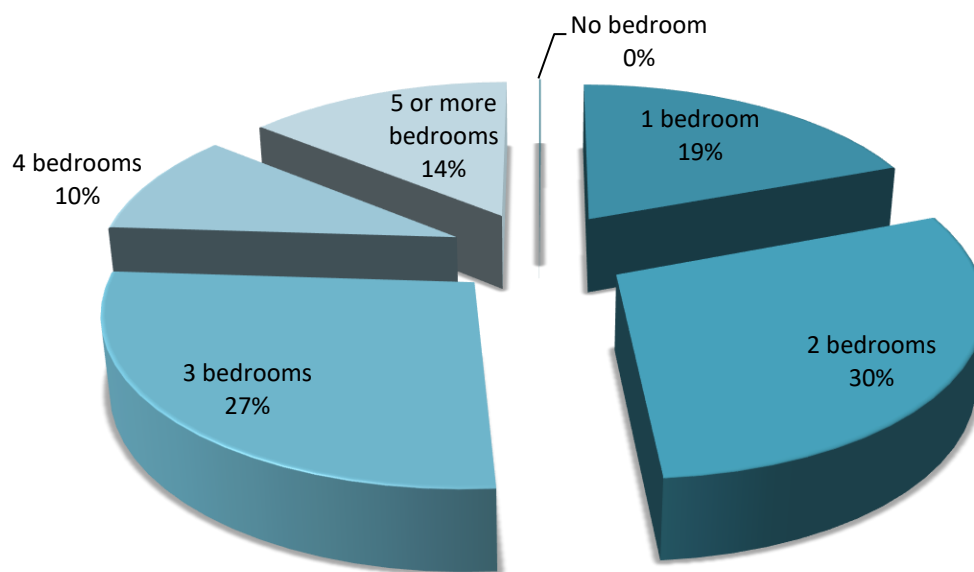
Source: Anguilla Population and Housing Census 2011

**Table 1.8**  
**Number of Households by Number of Rooms and Bedrooms, 2011**

	Number of Bedrooms										Total	
	0	1	2	3	4	5	6	7	8	Not Stated		
<b>No. of Rooms</b>												
1	4	0	0	0	0	0	0	0	0	0	0	4
2	0	749	0	0	0	0	0	0	0	0	0	749
3	0	243	599	0	0	0	0	0	0	0	0	842
4	0	47	707	214	0	0	0	0	0	0	0	968
5	0	749	0	0	0	0	0	0	0	0	0	945
6	0	4	50	412	216	18	0	0	0	0	0	700
7	0	1	11	144	154	42	4	0	0	0	0	356
8	0	0	3	46	69	43	14	1	0	0	0	176
9	0	0	1	15	25	19	15	4	0	0	0	79
10 & over	0	0	0	9	29	24	29	9	8	0	0	108
Not Stated	0	0	0	0	0	0	0	0	0	8	8	8
<b>Total</b>	<b>4</b>	<b>1,050</b>	<b>1,613</b>	<b>1,489</b>	<b>541</b>	<b>146</b>	<b>62</b>	<b>14</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>4,935</b>

Source: Anguilla Population and Housing Census 2011

**Chart 1.3**  
**Percentage Distribution of Households by Number of Bedrooms, 2011**

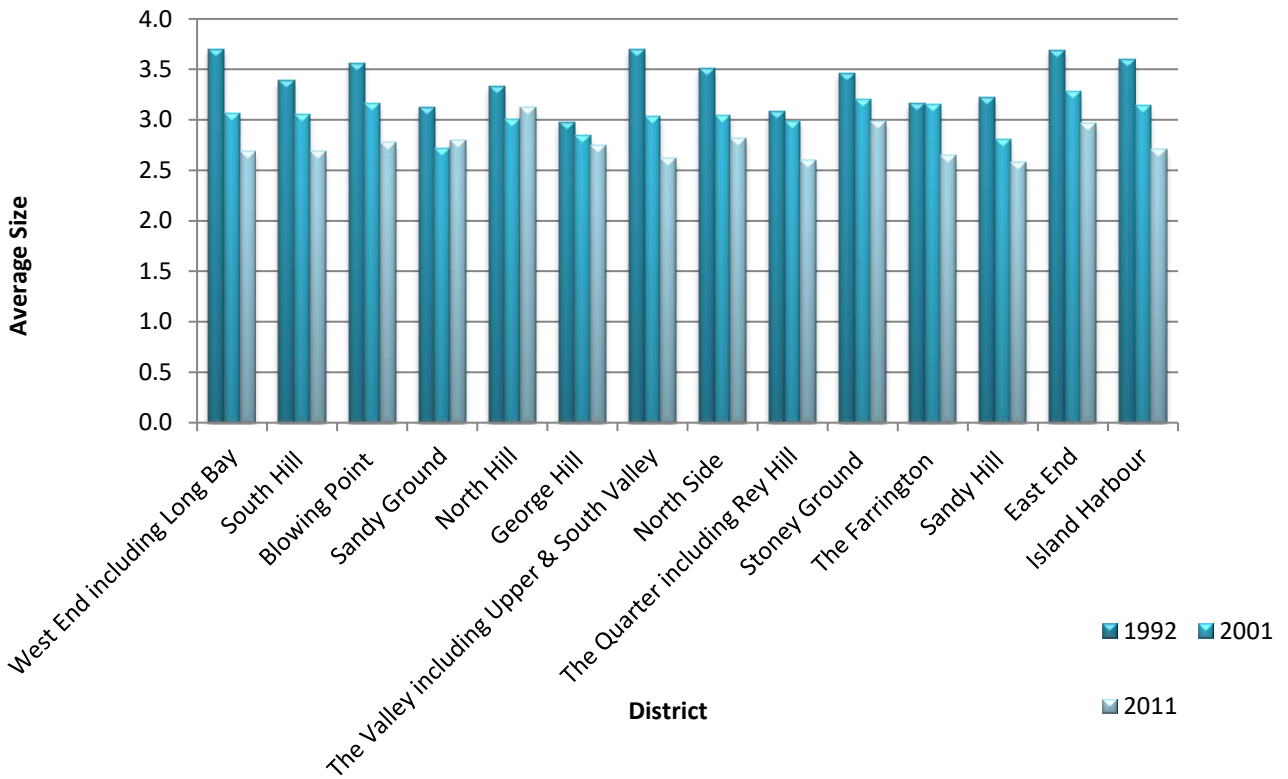


Source: Anguilla Population and Housing Census 2011





**Chart 1.9**  
**Average Household Size by District, 1992, 2001 and 2011**



**Source:** Anguilla Population and Housing Censuses 1992, 2001 and 2011



**CHAPTER 2**  
**TOURISM**



## Chapter 2: Tourism

Tourism contributes significantly to the development and growth of the economy in Anguilla. This chapter seeks to examine various indicators of the tourism industry in Anguilla.

- The total number of tourists in 2015 showed a 3.3% increase over the preceding period. The average length of nights tourists spent reflected a 0.2% decline in 2015 compared to 2014 (Table 2.1).
- Over the five year period, the data shows that most visitors originated from the USA, Europe and Canada. The 2015 totals show a 5.3% increase over 2014 visitor arrivals (Table 2.2).





## SUSTAINABLE DEVELOPMENT GOALS

### Goal

**8.9:** By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products

### Relevant Indicators

- **8.9.1:** Tourism direct GDP as a proportion of total GDP and in growth rate



### Goal

**12.B:** Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products

### Relevant Indicator

- **12.B.1:** Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability

## DEFINITIONS

<b>CARIB</b>	Includes all other Caribbean countries excluding St. Martin F.W.I. (and the rest of the French West Indies) and St. Maarten D.W.I. (and the rest of the Dutch West Indies)
<b>OTHER</b>	Includes all other countries and territories not elsewhere categorised
<b>Other Europe</b>	Includes all other European countries excluding the UK, Italy and Germany
<b>St. Maarten D.W.I.</b>	Includes St. Eustatius, St. Marteen, Saba, Aruba, Bonaire and Curaçao
<b>St. Martin F.W.I.</b>	Includes Saint Barthélemy, St. Martin and Martinique and Guadeloupe
<b>U.K.</b>	United Kingdom
<b>U.S.A</b>	United States of America

**VISITORS:** In any particular place, visitors represent all non-residents. They are divided into day visitors (sometimes referred to as excursionists) and tourists (sometimes referred to as stay-overs).

**TOURISTS:** These are persons normally resident abroad (excluding those with Anguillian belongingship) who enter the island and remain for not less than twenty-four hours and not more than six months for legitimate non-immigrant purposes such as:-

- a) Pleasure, Recreation, Holiday, Sport
- b) Business, Visiting Friends and Relatives, Conference, Health, Studies, Religion, Mission, Meetings

**EXCURSIONISTS:** These are visitors staying less than twenty-four hours in the country visited and not over-nighting at an accommodation establishment.

**AVERAGE LENGTH OF STAY:** This figure is derived from the intended length of stay as declared by the visitors to the Immigration officer, upon arrival into Anguilla. In Anguilla's case what is measured is intended length of stay as no matching occurs. The unit of measurement is days.

**COUNTRY OF RESIDENCE:** Country of residence is recorded as the country of citizenship defined on travel documents presented at border control.

**Daily Per Capita Electricity Consumption** = Electricity consumption/ Population

**Tourist Penetration Ratio:** This rate quantifies the average number of Tourists per thousand inhabitants in the country at any one point in time (day). (Tourist x average length of stay divided by population x 365)\*1000

**Tourist Density Ratio:** shows the density of tourist in the country at any point in time on average.  
(((Number of Tourist X Average Length of Overnight Stay)/365)/total area)

### Sources

- Anguilla Statistics Department
- Immigration Department
- Caribbean Tourism Organization
- CARICOM. Retrieved from  
<http://www.caricomstats.org/Files/Meetings/SocialandCensus/TOURISTPENETRATIONRATE-StLucia.pdf>

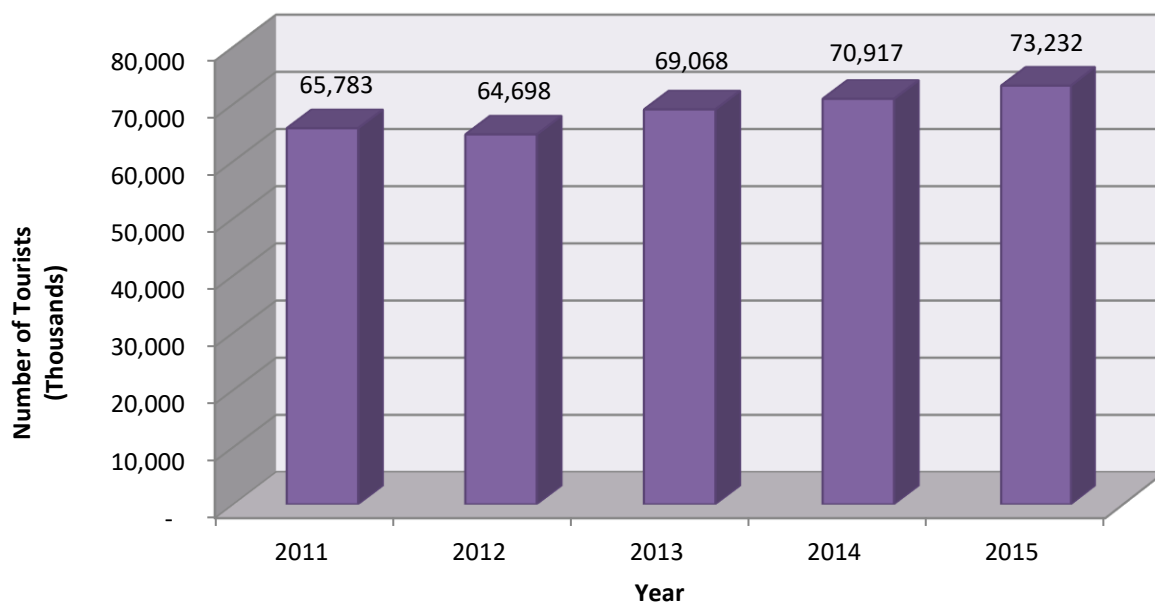


**Table 2.1**  
**Tourist, Cruise Ship Arrivals and Average tourists night spent, 2011 – 2015**

Item	2011	2012	2013	2014	2015
Stop Over (Tourists)	65,783	64,698	69,068	70,917	73,232
Cruise Passengers	1,588	2,839	2,627	6,095	6,817
Cruise Ship Arrivals	14	21	21	16	44
Average Tourist Nights Spent	7.8	7.7	7.5	7.5	7.3

Source: Immigration Department

**Chart 2.1**  
**Tourist Arrivals to Anguilla, 2011 - 2015**

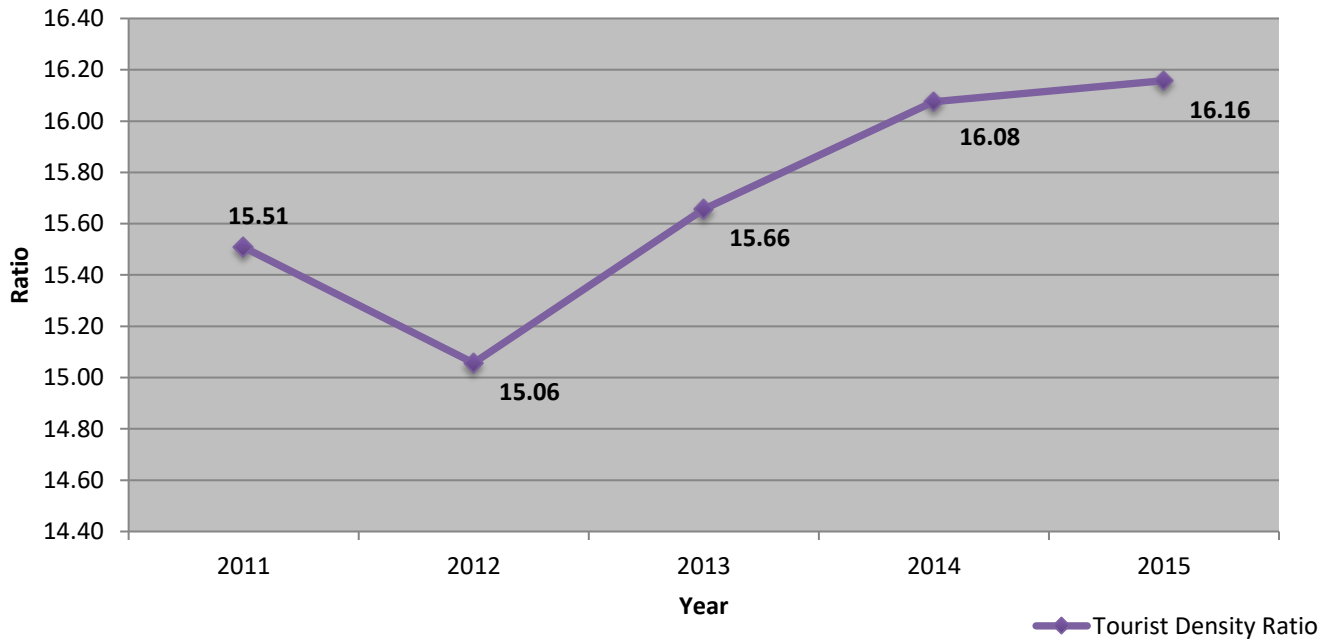


Source: Immigration Department





Chart 2.2  
Tourism Density Ratio, 2011 - 2015

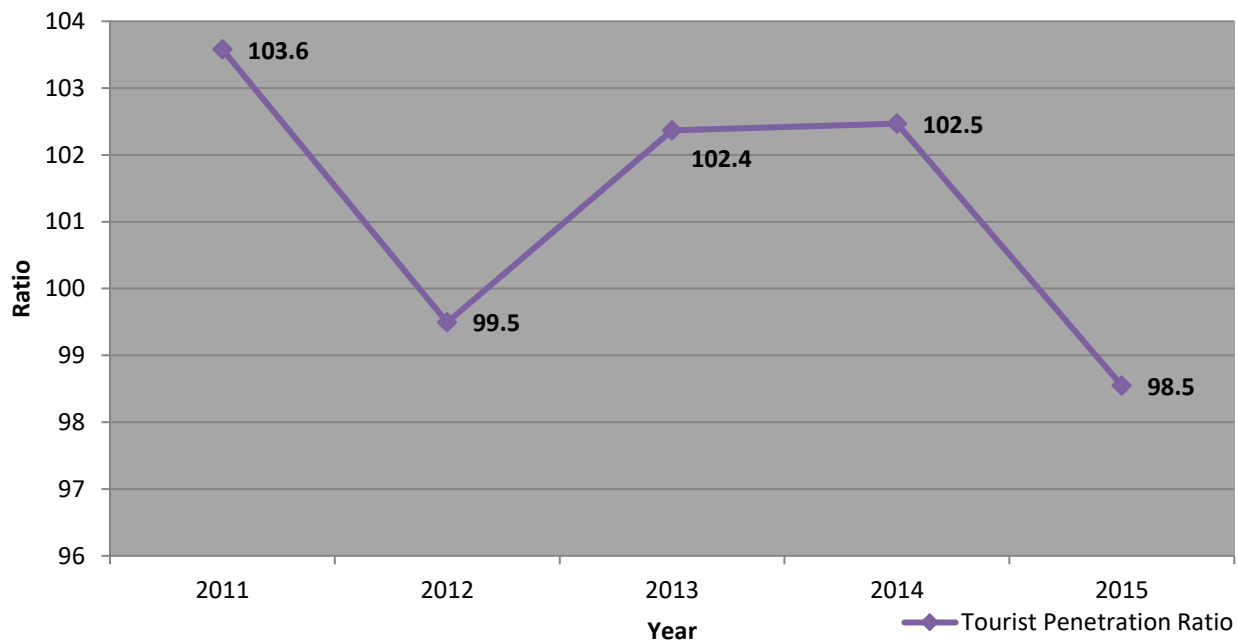


Source: Immigration Department and Anguilla Statistics Department





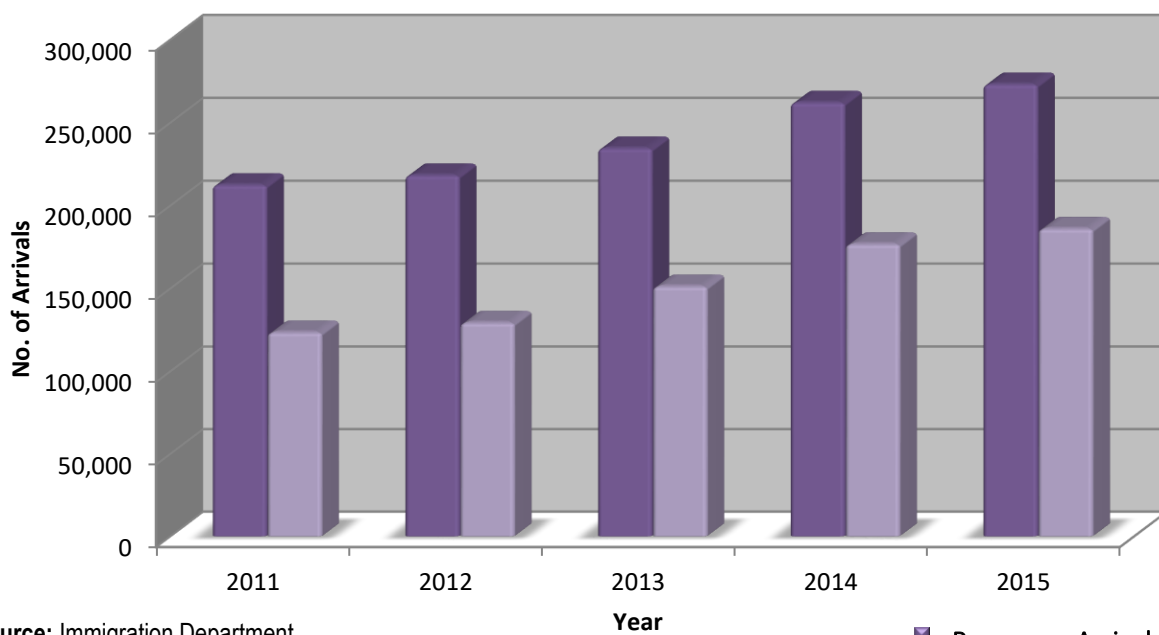
**Chart 2.3**  
**Tourist Penetration Ratio**



**Source:** Immigration Department and Anguilla Statistics Department



**Chart 2.4**  
**Air Passengers Arrivals and Total Visitors Arrivals, 2011 - 2015**



Source: Immigration Department

■ Passenger Arrivals  
■ Visitor Arrivals



**Table 2.2**  
**Total Visitors by Country of Origin, 2011 - 2015**

Country of Origin	2011	2012	2013	2014	2015
USA	66,399	70,190	85,415	101,091	105,189
Canada	7,141	7,994	9,931	11,835	12,173
U.K.	4,557	4,251	5,382	6,110	6,272
Italy	2,139	2,431	2,049	2,392	2,402
Germany	1,024	1,091	1,465	2,582	1,880
Eur (oth)	12,731	13,644	15,777	18,172	19,115
FWI	7,064	7,225	6,781	7,805	9,589
DWI	8,272	8,436	8,417	8,436	10,316
Carib.	8,290	7,958	8,560	8,866	10,079
Other	5,941	6,171	7,526	9,491	9,053
<b>Total</b>	<b>123,558</b>	<b>129,391</b>	<b>151,303</b>	<b>176,780</b>	<b>186,068</b>

Source: Immigration Department

**Table 2.3**  
**Estimated Electricity Consumption by Tourist Arrivals: 2011 - 2015**

Type of Accommodation	2011	2012	2013	2014	2015
Tourists Arrivals	65,783	64,698	69,068	70,917	73,232
Average length of stay	7.8	7.7	7.5	7.5	7.3
Electricity consumption (kWh)	95,158,141	87,277,963	85,812,892	89,503,226	94,263,734
Daily per capita electricity consumption (kWh)	7,011	6,295	6,125	6,229	6,343
<b>Estimated electricity consumption by Tourists Arrivals (kWh)</b>	-	-	-	-	-
<b>Change in estimated electricity consumption by Tourist Arrivals (%)</b>	-	-	-	-	-
<b>Total</b>	-	-	-	-	-

Source: Anguilla Tourist Board and Anguilla Hotel and Tourism Association



# **CHAPTER 3**

## **ENVIRONMENTAL HEALTH**



### Chapter 3: Environmental Health

Environmental Health is an important indicator of the well-being of a country as it speaks to disease surveillance, prevention and control. This chapter seeks to examine some indicators of the environmental health of Anguilla.

- As it relates to environmentally related diseases, the total number of reported cases showed a 9% decline over the preceding period (Table 3.1).
- Over the five year period, the most reported cases (32.4%) of environmentally related diseases were respiratory diseases, followed by gastroenteritis (31.7%) and viral illnesses (28.1%) (Table 3.1).
- A review of the total inches of rainfall over the five year period, showed that Anguilla saw overall declines, moving from 61.5 inches of rainfall in 2011 to 23.1 inches in 2015 (Table 3.2).
- The annual mean temperature has continued to increase with the highest annual mean temperature recorded in 2015 at 28.7 degrees Celsius (Table 3.3).





## SUSTAINABLE DEVELOPMENT GOALS

### Goal

**6.1: By 2030, achieve universal and equitable access to safe and affordable drinking water for all**

### Relevant Indicators

- **6.1.1:** Proportion of population using safely managed drinking water services

### Goal

**6.2: By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations**

### Relevant Indicators

- **6.2.1:** Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

### Goal

**6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally**

### Relevant Indicators

- **6.3.1:** Proportion of domestic and industrial wastewater flows safely treated





## DEFINITIONS

**Environmentally related diseases** refer to diseases that cause an interruption, cessation or disorder of human bodily functions, systems or organs due to unfavourable environmental factors. According to the Dictionary of Epidemiology, edited for the International Epidemiological Association by John M. Last, a case in epidemiology is a person in the population or study group identified as having the particular disease, health disorder, or condition under investigation. A variety of criteria may be used to identify cases, e.g. individual physician's diagnoses, registries and notifications, abstracts of clinical records, surveys of the general population, and population screening, among others. The epidemiological definition of a case is not necessarily the same as the ordinary clinical definition.

### **Types of Environmentally Related Diseases**

**Gastroenteritis** is an inflammation of the stomach and intestines with many possible causes, such as: bacteria (responsible for acute food poisoning), parasites, food intolerances, drugs (antibiotics in particular) or most common viral infections.

**Typhoid:** Typhoid fever is a bacterial infection caused by ingesting contaminated food or water. Symptoms are characterized by headaches, nausea and loss of appetite.

**Malaria** is caused by a parasite called Plasmodium, which is transmitted via the bites of infected mosquitoes. In the human body, the parasites multiply in the liver, and then infect red blood cells.

**Dengue** is an acute, febrile illness, caused by one of four types of dengue virus. Viral transmission is through the bite of an infected Aedes aegypti mosquito. Dengue fever is usually seasonal, with an increase in cases occurring after the onset of the rainy season.

**Cholera** is an acute intestinal infection caused by ingestion of food or water contaminated with the bacterium Vibrio cholerae. It has a short incubation period, from less than one day to five days, and produces an enterotoxin that causes a copious, painless, watery diarrhoea that can quickly lead to severe dehydration and death if treatment is not promptly given. Vomiting also occurs in most patients.

**Accidental Pesticide Poisoning:** A case of Accidental Pesticide Poisoning is defined as any person who, after having been exposed to one or more pesticides, presents clinical manifestations of poisoning, or specific laboratory test results compatible with poisoning, in the first 24 hours after contact. Accidental refers to the unintentional and unexpected exposure to pesticides. This includes food poisoning.



**Poisoning:** A poison is any substance that causes harm if it gets into the body. Harm can be mild (for example, headache or nausea) or severe (for example, fits or very high fever), and severely poisoned people may die. When people are in contact with a poison they are said to be exposed to it.

**Diarrhoea** is the passage of three (3) or more loose or liquid stools per day, or more frequently than is normal for the individual. It is usually a symptom of gastrointestinal infection, which can be caused by a variety of bacterial, viral and parasitic organisms. Infection is spread through contaminated food or drinking-water, or from person to person as a result of poor hygiene. Severe diarrhoea leads to fluid loss, and may be life-threatening, particularly in young children and people who are malnourished or have impaired immunity.

**Respiratory tract diseases** are diseases that affect the air passages, including the nasal passages, the bronchi and the lungs. They range from acute infections, such as pneumonia and bronchitis, to chronic conditions such as asthma and chronic obstructive pulmonary disease.

**Other:** Other refers to any other environmentally related diseases not previously mentioned.

#### Sources

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- World Health Organization. Malaria. Retrieved from <https://www.cdc.gov/malaria/>
- World Health Organization. Dengue. Retrieved from <https://www.cdc.gov/dengue/clinicalab/clinical.html>





**Table 3.1**  
**Reported Cases of Environmentally-Related Diseases by Sex: 2011 – 2015**

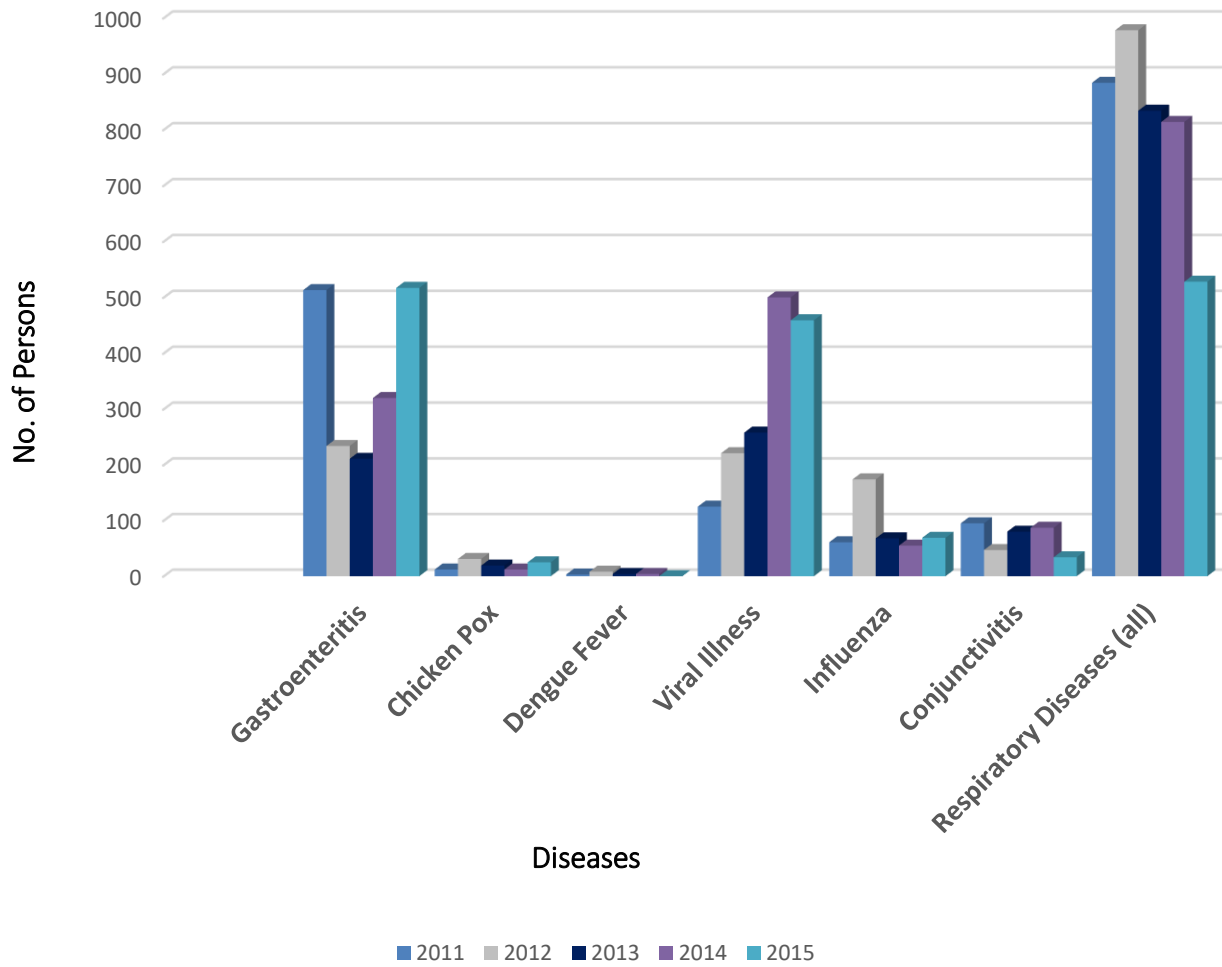
<b>Cause</b>	<b>Sex</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Gastroenteritis	Female	-	-	-	181	287
	Male	-	-	-	139	230
	Total	513	234	211	320	517
Chicken Pox	Female	-	-	-	6	7
	Male	-	-	-	6	18
	Total	12	31	19	12	25
Dengue Fever	Female	-	-	-	3	0
	Male	-	-	-	1	0
	Total	3	8	4	4	0
Viral Illness	Female	-	-	-	281	246
	Male	-	-	-	219	213
	Total	125	221	258	500	459
Influenza	Female	-	-	-	30	47
	Male	-	-	-	25	22
	Total	61	174	68	55	69
Conjunctivitis	Female	-	-	-	54	16
	Male	-	-	-	33	18
	Total	95	47	80	87	34
Respiratory Diseases (all)	Female	-	-	-	459	289
	Male	-	-	-	355	239
	Total	884	978	834	814	528
<b>Total Cases, all causes</b>	Female	-	-	-	-	-
	Male	-	-	-	-	-
	Total	1,693	1,693	1,474	1,792	1632
<b>Percentage Change (%)</b>	Female	-	-	-	-	-
	Male	-	-	-	-	-
	Total	-4	-4	11	-9	-9

**Source:** Environmental Health Unit

**Note:** Respiratory diseases (all) include acute bronchitis, chronic sinusitis, asthma, pneumonia, etc.



Chart 3.1  
Number of Reported Cases of Environmentally –Related Diseases by Cause: 2011 - 2015



Source: Environmental Health

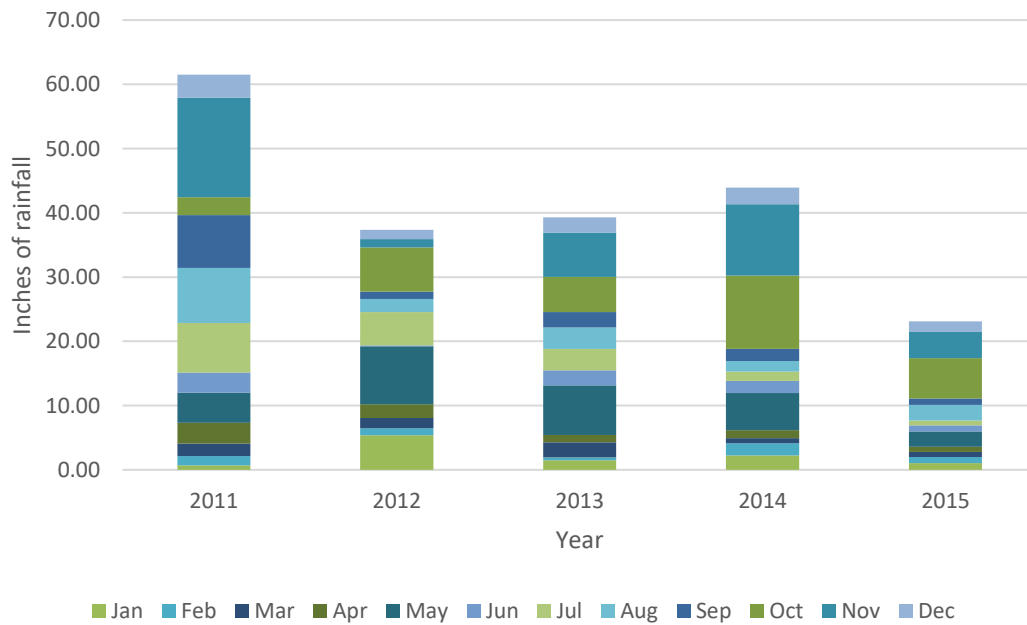


**Table 3.2**  
**Total Number of Inches of Rainfall: 2011 – 2015**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>2011</b>	0.7	1.43	1.95	3.25	4.69	3.14	7.71	8.55	8.22	2.8	15.5	3.57	<b>61.51</b>
<b>2012</b>	5.36	1.12	1.61	2.11	9.01	0.16	5.2	2.03	1.14	6.9	1.27	1.42	<b>37.33</b>
<b>2013</b>	1.5	0.47	2.31	1.15	7.7	2.37	3.33	3.33	2.38	5.51	6.87	2.38	<b>39.30</b>
<b>2014</b>	2.23	1.89	0.79	1.28	5.77	1.91	1.42	1.65	1.91	11.4	11.1	2.57	<b>43.92</b>
<b>2015</b>	1.05	0.96	0.76	0.81	2.42	0.91	0.78	2.40	1.01	6.27	4.09	1.64	<b>23.10</b>

Source: Meteorological Office

**Chart 3.2**  
**Total Number of Inches of Rainfall: 2011 – 2015**



Source: Meteorological Office

**Table 3.3**  
**Mean Daily Maximum, Minimum and Daily Air Temperature: 2011 – 2015**

Year		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Mean
<b>2011</b>	<b>MIN</b>	21.3	20.2	19.9	20.6	22.2	21.8	23.4	22.7	23.2	23.2	22.1	21.6	<b>21.9</b>
	<b>MAX</b>	28.9	28.4	27.3	31	30.6	32.4	31.6	31.4	31.2	31	30.4	28.5	<b>30.2</b>
	<b>MEAN</b>	27.8	27.7	26.7	27.3	27.4	29.4	28.3	28.8	28.9	29.4	27.3	26.5	<b>28.0</b>
<b>2012</b>	<b>MIN</b>	18.9	18.8	20.2	20.3	21.2	22.3	21.4	22.3	23.1	22.6	22.2	20.0	<b>21.1</b>
	<b>MAX</b>	29.2	28.6	28.4	29.3	29.7	30.7	31.9	31.1	32.3	32.0	30.7	29.6	<b>30.3</b>
	<b>MEAN</b>	26.2	26.2	26.4	27.2	27.5	29.2	29.5	29.5	30.0	29.2	28.8	27.4	<b>28.1</b>
<b>2013</b>	<b>MIN</b>	19.9	18.8	19.8	20.7	21.6	23.1	23.0	24.1	24.3	24.5	21.6	20.4	<b>21.8</b>
	<b>MAX</b>	29.5	28.8	29.3	29.6	31.0	31.1	31.5	32.0	31.9	31.7	30.4	29.3	<b>30.5</b>
	<b>MEAN</b>	26.7	26.7	26.8	27.7	27.9	28.7	29.3	29.8	30.3	29.5	28.0	27.0	<b>28.2</b>
<b>2014</b>	<b>MIN</b>	20.6	21.3	20.2	21.3	20.2	23.3	22.7	22.7	23.3	23.0	21.4	21.0	<b>21.8</b>
	<b>MAX</b>	28.5	28.7	29.5	29.7	30.1	31.0	31.8	31.9	32.9	32.5	31.0	30.5	<b>30.7</b>
	<b>MEAN</b>	26.7	26.7	26.8	27.7	27.9	28.7	29.3	29.8	30.3	29.5	28.0	27.0	<b>28.4</b>
<b>2015</b>	<b>MIN</b>	21.1	21.8	20.8	21.0	22.2	23.7	22.2	22.8	23.8	22.2	21.9	22.0	<b>22.1</b>
	<b>MAX</b>	29.9	30.6	30.2	32.2	32.7	32.2	32.5	33.2	33.8	34.2	31.5	31.2	<b>32.0</b>
	<b>MEAN</b>	27.1	27.4	27.2	28.0	28.8	29.4	29.8	30.0	30.3	29.6	28.7	27.9	<b>28.7</b>

Source: Meteorological Office

**Table 3.4**  
**Mean Relative Humidity: 2012 – 2015**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>2012</b>	-	-	-	-	-	-	71.0	74.0	72.0	74.0	74.0	67.0	<b>72.0</b>
<b>2013</b>	70.0	70.0	71.0	68.0	74.0	73.0	75.0	71.0	71.0	74.0	77.0	77.0	<b>72.6</b>
<b>2014</b>	71.0	70.0	67.0	68.0	71.0	71.0	70.0	71.0	72.0	-	76.0	72.0	<b>70.8</b>
<b>2015</b>	75.0	69.0	69.0	67.0	67.0	67.0	66.0	70.0	70.0	74.0	71.0	70.0	<b>69.6</b>

Source: Meteorological Office



**CHAPTER 4**  
**NATURAL DISASTERS**



## Chapter 4: Natural Disasters

The indicators for natural disasters seek to examine the damage caused, as well as the frequency and severity of the disasters in Anguilla.

- Over the five year period, earthquakes had the highest frequency of occurrence followed by flash floods (Table 4.1).
- The total number of incidences by fire showed a decrease of 2% (Table 4.2).
- On average, 131 incidences by fire occur annually with 62% being minor and 40% being a motor vehicle type of incident and 10% other respectively (Chart 4.2).





## SUSTAINABLE DEVELOPMENT GOALS



### Goal

**1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters**

### Relevant Indicators

- **1.5.1:** Number of deaths, missing persons and persons affected by disaster per 100,000 people
- **1.5.2:** Direct disaster economic loss in relation to global gross domestic product (GDP)
- **1.5.3:** Number of countries with national and local disaster risk reduction strategies



### Goal

**11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations**

### Relevant Indicators

- **11.5.1:** Number of deaths, missing persons and persons affected by disaster per 100,000 people
- **11.5.2:** Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services



## Goal

**13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries**

### Relevant Indicators

- **13.1.1:** Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population
- **13.1.2:** Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030



## DEFINITIONS

**Disaster:** a natural event which overwhelms local capacity, necessitating a request for national or international assistance, or is recognized as such by a multilateral agency, or by at least two sources, such as national, regional or international assistance groups and the media. There are two types: sudden-impact disasters e.g. earthquakes or those that develop gradually e.g. drought.

**Type of Disaster:** Avalanches, floods, earthquakes, hurricanes, torrential rains, volcanic eruptions, droughts, landslides, mudslides, fires, blizzards, tsunamis, etc.

**Killed:** Persons confirmed as dead and persons missing and presumed dead.

**Injured:** People suffering from physical injuries, trauma or an illness requiring medical treatment as a direct result of a disaster.

**Homeless:** it is the sum of the injured, affected and left homeless as a consequence of a disaster.

**Affected:** People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance.

**Total affected:** The sum of people that have been injured, affected and left homeless after a disaster.

**Estimated damage:** The amount of damage to property, crops, and livestock. In EM-DAT estimated damage are given in US\$ ('000). For each disaster, the registered figure corresponds to the damage value at the moment of the event, i.e. the figures are shown true to the year of the event.

**Flash Flooding:** a sudden violent flood after a heavy rain. Rainfall intensity and duration, topography, soil conditions and ground cover contribute to flash flooding. (National Definition)

**Indirect Damage:** damage to the flows and goods that cease to be produced or the services that cease to be provided during a period of time beginning almost immediately after the disaster and possibly extending into the rehabilitation and reconstruction phase. Such is caused by direct damage to production capacity and social and economic infrastructure.

**Direct Damage:** damage sustained by immovable assets and inventories. This involves damage to property, total and partial destruction of physical infrastructure, buildings, installations, machinery, equipment, means of transportation, damage to cropland etc.

Population Affected Method/Formula:  $P_d = P_o (1 + r)^t$

- R = annual growth rate of the population
- T = extrapolation time
- $P_d$  = population affected

## SOURCES

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- Anguilla Department of Disaster Management
- CARICOM. Retrieved from <http://www.caricomstats.org/Files/Meetings/SocialandCensus/Tourist%20density,Natural%20Disaster-Belize.pdf>



**Table 4.1**  
**Natural Disasters: 2011 - 2015**

Year	Type of Disaster	Severity	Date Started	Total Casualties	Total Deaths	Total Population Affected	Damage (\$ thousands)
2011	Flash Flood		Thursday, December 22, 2011	-	-	Eastern End of Island. Damage to home, vehicles & businesses	N.A
2012	Earthquake	5.2	Wednesday, July 4, 2012	-	-	N.A.	N.A.
2013	Earthquake	3.3 Source USGS	Thursday, January 10, 2013	-	-	N.A.	N.A.
2014	Earthquake	4.7 Source USGS	May 2013	-	-	N.A.	N.A.
	Earthquake	4.3 Source USGS	Monday, September 9, 2013	-	-	N.A.	N.A.
	Earthquake	2.6 Source USGS	Sunday, October 6, 2013	-	-	N.A.	N.A.
2015	-	-	-	-	-	-	-

**Source:** Department of Disaster Management and Anguilla Statistics Department

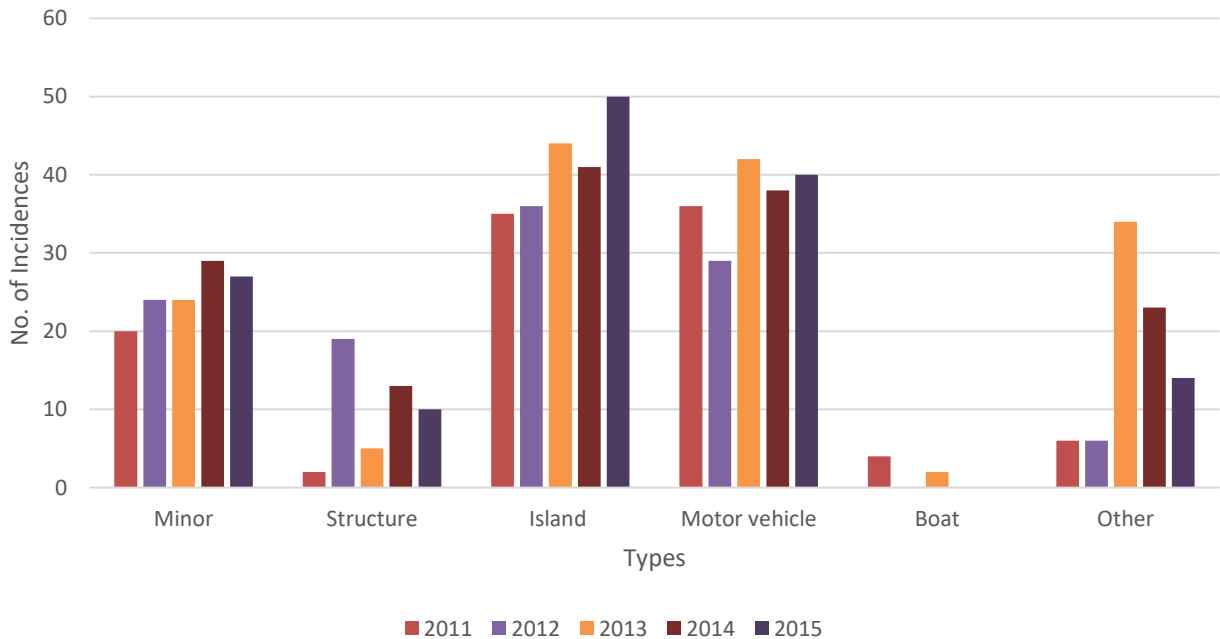


**Table 4.2**  
**Incidences of Fire by Type: 2011 – 2015**

Year	Total	Animal Rescue	Minor			Structure	Island Fires	Motor Vehicle		Boat Incidents	Other
			False Alarm	Pole Fires	Fires			Accidents			
2011	103	0	6	14	2	35	3	33	4	6	
2012	114	2	2	20	19	36	5	24	0	6	
2013	151	0	6	18	5	44	5	37	2	34	
2014	144	1	9	19	13	41	9	29	0	23	
2015	141	0	0	27	10	50	4	36	0	14	

Source: Anguilla Fire Services

**Chart 4.2**  
**Incidences of Fire by Type: 2011 – 2015**



Source: Anguilla Fire Services



**Table 4.3**  
**Storms Affecting Anguilla: 1950 – 2015**

<b>Year</b>	<b>Name</b>	<b>Date</b>	<b>Type</b>
1950	<b>Baker</b>	Aug 20 <sup>th</sup> – Sept 1 <sup>st</sup>	H1
1950	<b>Dog</b>	Aug 30 <sup>th</sup> - Sept 16 <sup>th</sup>	H2
1954	<b>Alice</b>	Dec 30 <sup>th</sup> - Jan 05 <sup>th</sup>	H
1960	<b>Donna</b>	Aug 29 <sup>th</sup> - Sept 13 <sup>th</sup>	H
1979	<b>Fredric</b>	Aug 29 <sup>th</sup> - Sept 14 <sup>th</sup>	T
1966	<b>Faith</b>		
1990	<b>Klaus</b>	Oct 03 <sup>rd</sup> - Oct 09 <sup>th</sup>	H1
1995	<b>Luis</b>	Aug 27 <sup>th</sup> - Sept 11 <sup>th</sup>	H4
1996	<b>Bertha</b>	July 05 <sup>th</sup> - July 14 <sup>th</sup>	H
1998	<b>George</b>	Sept 15 <sup>th</sup> - Sept 29 <sup>th</sup>	H
1999	<b>Jose</b>	Oct 17 <sup>th</sup> - Oct 25 <sup>th</sup>	H2
1999	<b>Lenny</b>	Nov 13 <sup>th</sup> - Nov 22 <sup>nd</sup>	H
2000	<b>Debby</b>	Aug 19 <sup>th</sup> - Aug 24 <sup>th</sup>	H
		Aug 30 <sup>th</sup> - Sept 16 <sup>th</sup>	H2
2010	<b>Earl</b>		
2014	<b>Gonzalo</b>		H3
2015	-	-	-

**Source:** Antigua & Barbuda Meteorological Services / National Hurricane Centre

**Note:** 'T' - Tropical Storm. Hurricanes with no category provided are labelled 'H' and H1 – Category 1

# CHAPTER 5

## ENERGY, MINERALS AND TRANSPORT



## Chapter 5: Energy, Minerals and Transport

The Energy, Minerals and Transport chapter comprises information on the consumption of energy and its use, as well as the use of minerals and the importation of vehicles and the effect it has on the environment.

- In 2015, Anguilla imported over 22,000,000 kg of light oils & preparations (i.e. motor spirits) and 11,000,000 kg of gas oils (diesel) (Table 5.1).
- Over the five-year period the highest per capita electricity consumption was recorded in 2011 with a total of 7,011 kWh, with the lowest consumption recorded in 2013 (6,125 kWh) (Table 5.2).
- As it relates to transport, data on new registered road vehicles over the period under review showed an increase. Commercial vehicles contributed to 54% of this increase, followed by motorcycles & scooters (32%), Taxis (9%) and government vehicles (5%) respectively (Table 5.4).



## SUSTAINABLE DEVELOPMENT GOALS



### Goal

**3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents**

### Relevant Indicators

- **3.6.1:** Death rate due to road traffic injuries



### Goal

**7.1: By 2030, ensure universal access to affordable, reliable and modern energy services**

### Relevant Indicators

- **7.1.1:** Proportion of population with access to electricity
- **7.1.2:** Proportion of population with primary reliance on clean fuels and technology



## DEFINITIONS

**Energy consumption** refers to all the energy used for heat, power, and electricity generation, regardless of where the energy was produced.

**Solid fuels** include hard coal, lignite, peat, patent fuel, lignite briquettes, peat briquettes, coke and bituminous sands.

**Liquid fuels** include crude oil, natural gas liquids, plant condensate, gasoline, petroleum products, jet fuel, kerosene, liquefied petroleum gas, refinery gas, feedstock, naphtha, lubricants, gas/ diesel oils and residual (heavy) fuel oils and bitumen.

**Gaseous fuels** include natural gas and other petroleum gases, such as gasworks gas, coke oven gas and blast furnace gas.

**Primary electricity** refers to electricity generated by non-combustible energy sources and includes electrical energy of geothermal, hydro, nuclear, tide, wind, wave/ocean and solar origin.

**Traditional fuels** include estimates of the consumption of charcoal, fuel wood and bagasse.

**Charcoal** is solid residue consisting mainly of carbon and obtained by the destructive distillation of wood in the absence of air.

**Fuel wood** is all wood in the rough that is used for fuel purposes.

**Bagasse** is the cellulosic residue left after sugar is extracted from sugar cane.

**Fuel** is defined as combustible matter used to maintain fire, such as coal, wood, oil, or gas, in order to create heat or power.

**Fuel used for cooking** refers to the fuel used predominantly for the preparation of principal meals. The number of households by type of fuel used for cooking describes the types of fuels that households use for cooking.

### Types of Cooking Fuel

**Charcoal** (in the table format it is coal – the terms need to be harmonized) is a solid residue that consists mainly of carbon and is obtained by the destructive distillation of wood in the absence of air.

**Wood** refers to all wood in the rough that is used for fuel.

**Liquefied Petroleum Gas (LPG)/Gas (Natural Gas):** LPG is a combination of hydrocarbons (propane, butane and ethane) which are gaseous under conditions of normal temperature and pressure, but are liquefied by compression or cooling to facilitate storage, handling and transportation.

**Natural gas** is a mixture of hydrocarbon compounds and small quantities of nonhydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs.

**Kerosene** is medium oil that is distilled between 150°C and 300°C. It is used as an illuminant and as a fuel and is often referred to as burning oil, vaporizing oil, power kerosene or illuminating oil.

**Electricity** is an electric current used as a source of power.

**Other** refers to types of cooking fuel not mentioned above.

**Type of lighting** refers to the source of lighting predominantly used by occupants of a housing unit.

**The number of households by type of lighting** describes the types of fuels that members of households use for lighting.

**Types of Fuel Used for Lighting Gas (Natural gas)** is a mixture of hydrocarbon compounds and small quantities of non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs. Kerosene is medium oil that is distilled between 150°C and 300°C. It is used as an illuminant and as a fuel and is often referred to as burning oil, vaporizing oil, power kerosene or illuminating oil.

**Electricity** is an electric current used as a source of power.

**Other** is other types of lighting fuel not so far mentioned.

**Electricity consumption per capita** = Electricity consumption/ Population

## SOURCES

- OECD's Glossary of Statistical Terms Retrieved from <http://stats.oecd.org/glossary/>
- The CARICOM Environment in Figures 2002, Caribbean Community Secretariat, United Nations (2003)



**Table 5.1**  
**Value of Imported Fuel by Type: 2011 – 2015**

Type	2011		2013		2014		2015	
	Value (\$)	Quantity (kg)	Value (\$)	Quantity (kg)	Value (\$)	Quantity (kg)	Value (\$)	Quantity (kg)
Light oils & preparations (i.e. motor spirits)	-	-	-	-	-	-	-	22,357,645
Gas oils (diesel)	-	-	-	-	-	-	-	11,745,209

Source: HM Customs Department

**Table 5.2**  
**Electricity Consumption by Type of Consumer: 2011 – 2015**

Year	Per Capita Electricity Consumption	Type		
		Residential ('000 kWh)	Commercial ('000 kWh)	Other <sup>1</sup> ('000 kWh)
2011	7,011	-	-	-
2012	6,295	-	-	-
2013	6,125	-	-	-
2014	6,229	-	-	-
2015	6,343	-	-	-

Source: ANGLEC

<sup>1</sup>Includes Government offices, public recreational facilities and street lighting



**Table 5.3**  
**Electricity Consumption: 2011 – 2015**

<b>Year</b>	<b>Per Capita Electricity Consumption</b>	<b>Electricity Generated (kWh)</b>	<b>Sales of Electricity Consumed (kWh)</b>	<b>Electricity Sold (XCD)</b>
2011	7,011	95,158,141	83,674,289	81,852,077
2012	6,295	87,277,963	78,886,857	82,253,631
2013	6,125	85,812,892	77,923,019	80,997,972
2014	6,229	89,503,226	78,666,821	80,293,635
2015	6,343	94,263,734	81,166,812	65,483,198

Source: ANGLEC

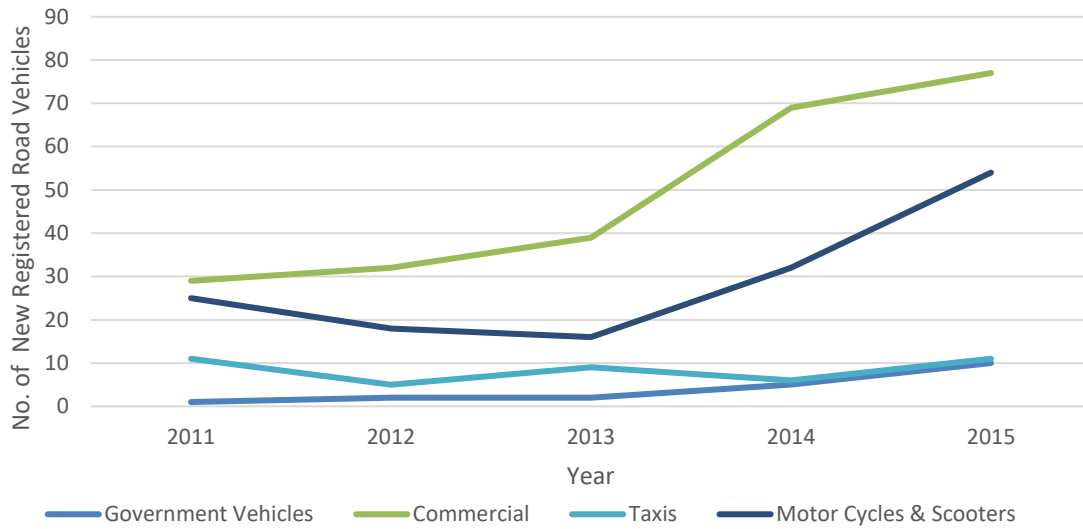
**Table 5.4**  
**New Registered Road Vehicles: 2011 – 2015**

<b>Type</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Government Vehicles	1	2	2	5	10
Commercial	29	32	39	69	77
Taxis	11	5	9	6	11
Motor Cycles & Scooters	25	18	16	32	54
<b>Total</b>	<b>66</b>	<b>57</b>	<b>66</b>	<b>112</b>	<b>152</b>
<b>Percentage Change (%) over pervious year</b>		<b>-14</b>	<b>16</b>	<b>70</b>	<b>36</b>

Source: Inland Revenue Department\*Number of vehicles for which a valid license was in effect as of 31<sup>st</sup> December

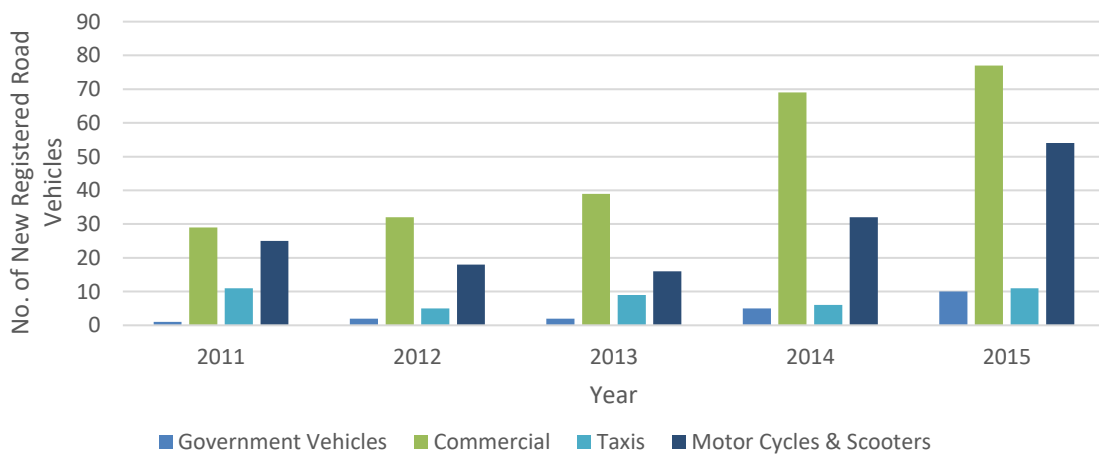


**Chart 5.4**  
**New Registered Road Vehicles: 2011 - 2015**



**Source:** Inland Revenue Department

**Chart 5.5**  
**New Registered road Vehicles: 2011-2015**



**Source:** Inland Revenue Department

# **CHAPTER 6**

## **COASTAL AND MARINE RESOURCES**



## Chapter 6: Coastal and Marine Resources

The Coastal and Marine Resources chapter identifies and measures the resources available within Anguilla over the five year period under review and identify the proportion of resources that are protected.

- Anguilla's total marine area is 83, 513 km<sup>2</sup>, of which 79.17 km<sup>2</sup> is protected marine area (Table 6.1).



## SUSTAINABLE DEVELOPMENT GOALS



**14.1: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution**

### Relevant indicators

- **14.1.1:** Index of coastal eutrophication and floating plastic debris density

### Goal

**14.2: By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans**

### Relevant indicators

- **14.2.1:** Number of countries using ecosystem-based approaches to managing marine areas

### Goal

**14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels**

### Relevant indicators

- **14.3.1:** Average marine acidity (pH) measured at agreed suite of representative sampling stations

### Goal

**14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics**

### Relevant indicators

- **14.4.1:** Proportion of fish stocks within biologically sustainable levels

**14.5: By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information**

- **14.5.1:** Coverage of protected areas in relation to marine areas



## DEFINITIONS

**Fish landings** are the weight of [the fish] that is landed at a landing site. May be different from the catch (which includes the discards).

**Catch:** The total number (or weight) of fish caught by fishing operations. Catch should include all fish killed by the act of fishing, not just those landed.

**Population of coastal areas** is the total population living within one hundred kilometres of the coastline. A country might also consider percentage of population in the low elevation coastal zone (<10 meters elevation) or percentage of population in river deltas.

**A coastal area** is the part of the land affected by its proximity to the sea, and that part of the sea affected by its proximity to the land as the extent to which man's land-based activities have a measurable influence on water chemistry and marine ecology

## SOURCES

- Restrepo V. (1999): Annotated Glossary of Terms in Executive Summary Reports of the International Commission for the Conservation of Atlantic Tunas' Standing Committee on Research and Statistics (SCRS). ICCAT. Source: <http://www.fao.org/fi/glossary/>, [http://www.un.org/esa/sustdev/natlinfo/indicators/methodology\\_sheets.pdf](http://www.un.org/esa/sustdev/natlinfo/indicators/methodology_sheets.pdf),
- European Environment Agency's website at [http://glossary.eea.europa.eu/EEAGlossary/C/coastal\\_area](http://glossary.eea.europa.eu/EEAGlossary/C/coastal_area).



**Table 6.1**  
**Total and Protected Marine Area: 2015**

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<b>Indicator</b>	
Total land and marine area (km <sup>2</sup> )	83,615.10
Total marine area (km <sup>2</sup> )	83,513.00
Protected marine area (km <sup>2</sup> )	79.15
Protected marine area as a % of total marine area	0.09%
Protected marine area as a % of total land and marine area	0.09%

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**Source:** Anguilla National Trust



**CHAPTER 7**  
**BIODIVERSITY**



## Chapter 7: Biodiversity

The Biodiversity section includes information on the percentage of water area against the percentage of land area within Anguilla that are protected and accessible.

- Anguilla's protected area, inclusive of land and water, totals 79.52 km<sup>2</sup> (Table 7.1).





## SUSTAINABLE DEVELOPMENT GOALS

### Goal

**15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.**

### Relevant indicators

- **15.1.1:** Forest area as a proportion of total land area.
- **15.1.2:** Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type.

## DEFINITIONS

**Biodiversity:** the range of genetic differences, species differences, and ecosystem differences in a given area.

**Protected Area:** legally established land or water area under either public or private ownership that is regulated and managed to achieve specific conservation objectives. A protected area, as adopted by the International Union for Conservation of Nature (IUCN), is defined as an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, natural and associated cultural resources and managed through legal or other effective means. It includes seven (7) categories which are:

Category Ia: Strict Nature Reserve

Category Ib: Wilderness Area

Category II: National Park

Category III: National Monument

Category IV: Habitat/Species Management Area

Category V: Protected Landscape/Seascape

Category VI: Managed Resource Protected Area

**Total Area:** Total area (of country) including area under inland water bodies, but excluding off-shore territorial waters (=total land area + water).

**Land Area:** is the total surface area of the country less that area covered by inland waters.

### Source

- CARICOM Environment Programme



**Table 7.1  
Protected Areas, 2015**

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<b>Category</b>	
Total area (km <sup>2</sup> )	83,615.10
Total land area (low tide mark) (km <sup>2</sup> )	102.10
Total water area (km <sup>2</sup> )	83,513.00
Protected land area (km <sup>2</sup> )	0.47
Protected land area as a % of total land area	0.46%
Protected land area as a % of total area	0.00%
Protected water area (km <sup>2</sup> )	79.15
Protected water area as a % of total water area	0.09%
Protected water area as a % of total area	0.09%
Total protected area (land and water) (km <sup>2</sup> )	79.52
Total protected area as a % of total area	0.10%

---

**Source: Anguilla National Trust**

Total area: Land, marine water and mainland and offshore quay ponds

Total land area (low tide mark): Total land & ponds on the mainland as well as those on Dog Island, Prickly Pear East & Scrub Island (does not include land on Scilly Cay, Anguillita or the smaller rocky outcroppings of the Seal Islands and those around Dog Island)

Total water area: Only marine environment Exclusive Economic Zone (EEZ) inclusive

# CHAPTER 8

## WASTE





## Chapter 8: Waste

This chapter seeks to analyse the waste management in Anguilla disaggregated into types of waste and the generation of waste between 2011 and 2014.

- The generation of waste from households as well as other origins over 2011-2014 has decreased (Table 8.1).
- A total of 282,986.36 m<sup>3</sup> of waste has been collected between 2011-2014 with the majority of the waste being household (56%) followed by green waste (24%), commercial waste (14%) and industrial waste (6%) respectively (Table 8.2).



## SUSTAINABLE DEVELOPMENT GOALS



### Goal

**11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management**

### Relevant indicators

- **11.6.1:** Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities



### Goal

**6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally**

### Relevant indicators

- **6.3.1:** Proportion of wastewater safely treated



### Goal

**12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse**

### Relevant indicators

- **12.5.1:** National recycling rate, tons of material recycled

## DEFINITIONS

**Waste:** "Materials that are not prime products (i.e., products produced for the market) for which the generator has no further use for his own purpose of production, transformation or consumption, and which he discards, or intends or is required to discard.

It excludes material directly recycled or reused at the place of generation (i.e., establishment) and waste materials that are directly discharged into ambient water or air as wastewater or air pollution."

**Management of waste:** Collection, transport, treatment and disposal of waste, including after-care of disposal sites.

**Hazardous waste:** Hazardous waste refers to the categories of waste to be controlled according to the Basel Convention on the control of transboundary movements of hazardous waste and their disposal (Article 1.1 and Annex I).

**Recycling:** Any reprocessing of waste material in a production process that diverts it from the waste stream, except reuse as fuel. Both reprocessing as the same type of product, and for different purposes should be included. Recycling within industrial plants i.e., at the place of generation should be excluded.

**Incineration:** The controlled combustion of waste with or without energy recovery.

**Landfilling:** Final placement of waste into or onto the land in a controlled or uncontrolled way. The definition covers both landfilling in internal sites (i.e., where a generator of waste is carrying out its own waste disposal at the place of generation) and in external sites.

**Other (waste treatment/disposal for hazardous waste):** Any final treatment or disposal different from recycling, incineration and landfilling. Examples include physical/chemical treatment, biological treatment, releasing into water bodies and permanent storage.

**Municipal waste:** collected by or on behalf of municipalities, by public or private enterprises, includes waste originating from: households, commerce and trade, small businesses, office buildings and institutions (schools, hospitals, government buildings). It also includes bulky waste (e.g., white goods, old furniture, mattresses) and waste from selected municipal services, e.g., waste from park and garden maintenance, waste from street cleaning services (street sweepings, the content of litter containers, market cleansing waste), if managed as waste. The definition excludes waste from municipal sewage network and treatment, municipal construction and demolition waste.

**Total amount of municipal waste collected:** Municipal waste collected by or on behalf of municipalities, as well as municipal waste collected by the private sector. It includes mixed waste, and fractions collected separately for recovery operations (through door-to-door collection and/or through voluntary deposits).

**Municipal waste managed in the country:** The amount of municipal waste collected in the country - amount exported for treatment or disposal + amount imported for treatment or disposal.

**Composting:** A biological process that submits biodegradable waste to anaerobic or aerobic decomposition, and that results in a product that is recovered and can be used to increase soil fertility.

**Controlled landfilling:** Final placement of waste into or onto the land in a controlled landfill site.

**Other (waste treatment/disposal):** Any final treatment or disposal different from recycling, composting, incineration and landfilling. Examples include releasing into water bodies and permanent storage.

**Population (total, urban, rural) served by municipal waste collection:** The proportion of the total, urban and rural resident population covered by regular municipal waste removal service in relation to the total, urban and rural resident population, respectively, of the country or the city.

## SOURCES

- United Nations Division (UNSD)
- United Nations Environment Programme (UNEP)

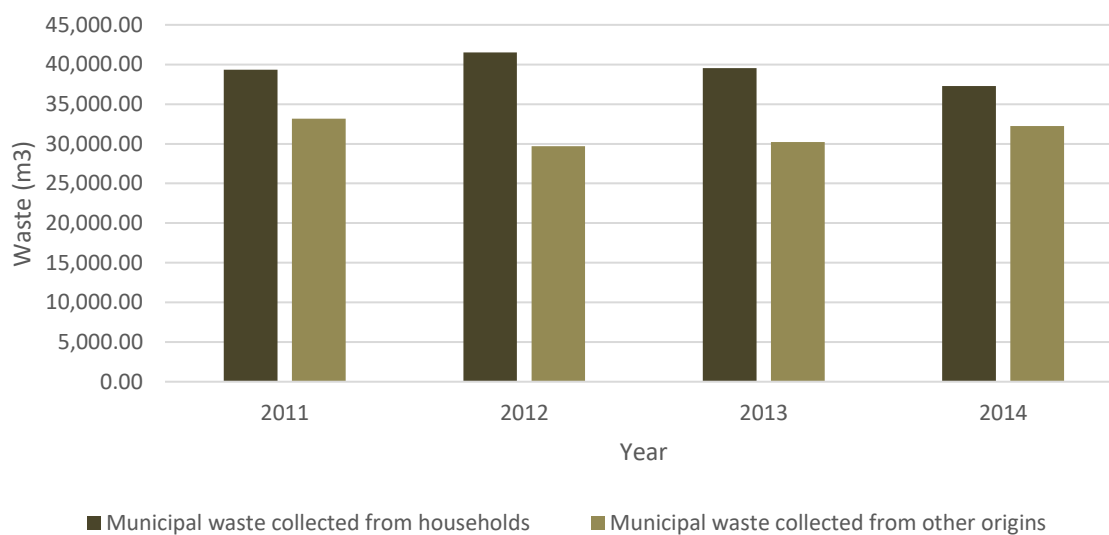


**Table 8.1**  
**Generation of Waste by Source, 2011 – 2015**

<b>Indicator</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Municipal waste collected from households	39,327.54	41,520.50	39,552.88	37,283.25	-
Municipal waste collected from other origins	33,165.46	29,684.50	30,222.76	32,229.48	-
Total amount of municipal waste collected	72,493.00	71,205.00	69,775.64	69,512.73	-
<b>Percentage change (%) over previous year</b>		<b>-1.8</b>	<b>-2.0</b>	<b>-0.4</b>	<b>-</b>

Source: Environmental Health Unit

**Chart 8.1**  
**Generation of Waste by Source, 2011-2014**



Source: Environmental Health Unit



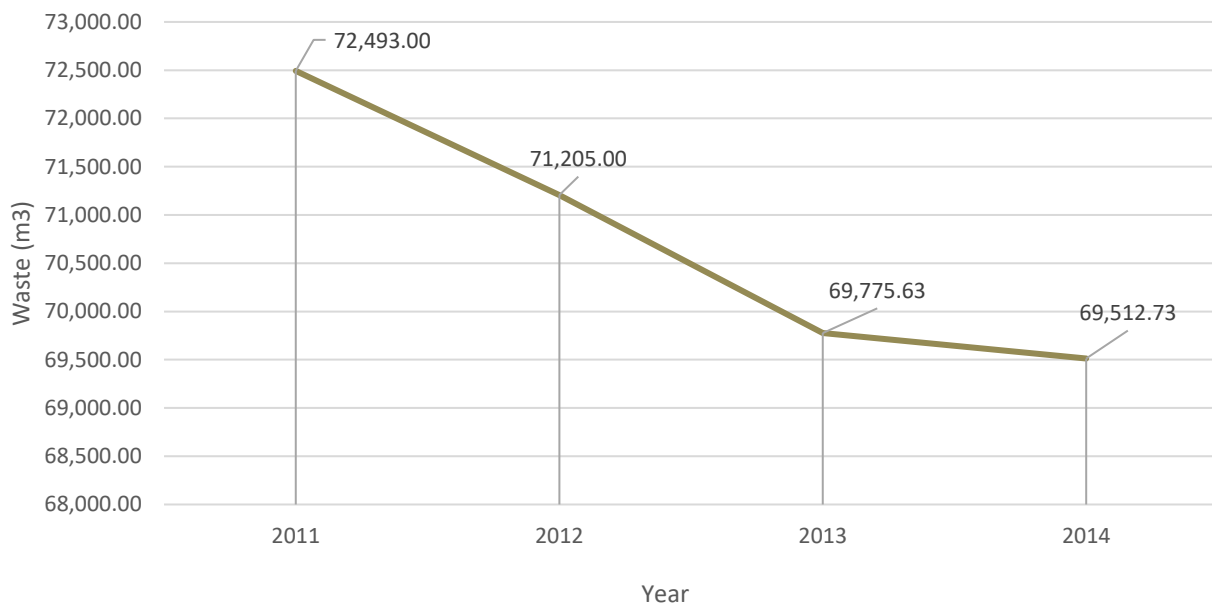


**Table 8.2**  
**Generation of Waste by Category, 2011 – 2014**

Category	2011	2012	2013	2014	2015
Household	39,327.54	41,520.50	39,552.88	37,283.25	-
Green	18,823.43	14,383.25	15,349.75	19,574.00	-
Commercial	10,536.04	10,803.25	10,304.88	9,349.50	-
Industrial	3,805.99	4,498.00	4,568.13	3,305.98	-
<b>Total</b>	<b>72,493.00</b>	<b>71,205.00</b>	<b>69,775.63</b>	<b>69,512.73</b>	-

Source: Environmental Health Unit

**Chart 8.2**  
**Generation of Waste, 2011 - 2014**



Source: Environmental Health Unit


2015



# ENVIRONMENTAL STATISTICS COMPENDIUM

Anguilla Statistics Department  
Ministry of Sustainability, Innovation and the Environment  
Government of Anguilla.  
ANGUILLA, BWI

axastats



Environmental Statistics Compendium  
2015

Environment and Multi-Domain Statistics | 3.1 - Environment Statistics