

# CURRENT DATA ON THE TOURISM INDUSTRY – SHORT VERSION

**Economic meaning and  
sustainability**

---

Published by:  
Statistisches Bundesamt (Destatis) / Federal Statistical Office (Destatis)  
[www.destatis.de/contact](http://www.destatis.de/contact)

Central Information Service  
Phone: +49 (0) 611 / 75 24 05

Published in December 2021

© Statistisches Bundesamt (Destatis), 2021  
Reproduction and distribution, also of parts, are permitted  
provided that the source is mentioned.

<b>1</b>	<b>Introduction and important results</b>	<b>5</b>
1.1	Introduction	5
1.2	Important results	5
<b>2</b>	<b>Tourism and Economy: Overview of TSA-Table</b>	<b>8</b>
2.1	TSA 1 – Tourist Expenses of Foreigners in Germany at Purchaser's Prices	8
2.2	TSA 2 – Tourist Expenses of Residents in Germany at Purchaser's Prices	10
2.3	TSA 3 – Tourist Expenses of Residents Abroad at Purchaser's Prices	12
2.4	TSA 4 – Domestic tourist Consumption at Purchaser's Prices	14
2.5	TSA 5 – Output and Production Values of Tourism and other Sectors of the Economy at basic Prices	16
2.6	TSA 6 – Tourism Use Table	19
2.7	TSA 7 – Employed Persons connected to Tourism Consumption	22
2.8	TSA 8 – Gross fixed Capital Formation in the tourist Industries	25
2.9	TSA 9 – Tourism-related Tax Revenues and Government Expenditures	27
2.10	TSA 10 – Indirect Effects	28
<b>3</b>	<b>Sustainability and Tourism</b>	<b>31</b>
3.1	Energy consumption	31
3.2	Air emissions	34
3.3	Raw material input in raw material equivalents	36
3.4	Environmental protection expenditure	38
	<b>Table Directory</b>	
2.2-1:	Tourist expenses of foreigners in Germany by type of trip, 2019	9
2.2-2:	Tourist expenses of foreigners in Germany	9
2.2-1:	Tourist expenses of residents in Germany by type of trip, 2019	11
2.2-2:	Tourist expenses of residents in Germany	11
2.3-1:	Tourist expenses of residents abroad by type of trip, 2019	13
2.3-2:	Tourist expenses of residents abroad	13
2.4-1:	Domestic tourist consumption at purchaser's prices according to tourist categories, 2019	15
2.4-2:	Domestic tourist consumption at purchaser's prices	15
2.5-1:	Output of tourism and other branches of the economy at basic prices 2019	17
2.5-2:	Output of total economy and tourism share at basic prices	18
2.6-1:	Use of tourist products at purchaser's prices, 2019	20
2.6-2:	Gross value added for tourism products by industry, 2019	21
2.6-3:	Gross value added for tourism products and total	21
2.7-1:	Tourism-related employment according to tourism and other economic sectors, 2019	23
2.7-2:	Gross value added per employed person for selected economic sectors	24
2.7-3:	Employees relevant to tourism	25
2.8-1:	Gross fixed capital formation in tourism and other economic sectors, 2019	26
2.8-2:	Gross fixed capital formation	26
2.9-1:	Tourism-related government income and expenditures	27
2.10-1:	Direct and indirect output for tourism purposes	28
2.10-2:	Direct and indirect gross value added for tourism purposes	29
2.10-3:	Direct and indirect persons in employment in tourism	30
3.1-1:	Tourism-related energy consumption by product group	32
3.1-2:	Tourism-related energy consumption by product group and energy carriers, 2019	33
3.2-1:	Tourism-related greenhouse gas emissions by product group	35
3.3-1:	Tourism-related raw material input by product group	37
3.4-1:	Tourism-related use of market-based environmental protection services by environmental domains	38
3.4-2:	Tourism-related use of market-based environmental protection services by environmental domains and economic sectors, 2018	39
	<b>Bibliography</b>	<b>40</b>

### List of Abbreviations

CEPA 2000	Classification of Environmental Protection Activities and Expenditures
CH <sub>4</sub>	Methane
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
Destatis	Federal Statistical Office
DIWEcon	The Consulting Company of the German Institute of Economic Research Berlin
GVA	Gross value added
gws	Institute of Economic Structures Research
HFC	Partially halogenated hydrocarbons
Mill.	million
N <sub>2</sub> O	Nitrous oxide
NF <sub>3</sub>	Nitrous trifluoride
NH <sub>3</sub>	Ammonia
NM VOC	Non-methane volatile organic compounds
NO <sub>x</sub>	Nitrogen oxides
PFC	Perfluorinated hydrocarbons
PM 10 µm	Particulate matter with a maximum diameter of 10 micrometer (µm)
PM 2,5 µm	Particulate matter with a maximum diameter of 2,5 micrometer (µm)
RMI	Raw Material Input
SF <sub>6</sub>	Sulfur hexafluoride
t	Tonnes
TJ	Terajoule
TSA	Tourism Satellite Accounts
UGR	Environmental-Economic Accounts

# 1 Introduction and important results

## 1.1 Introduction

Due to the important role tourism plays for the economy and the environment in Germany, the interest in precise data is correspondingly great. The Federal Statistical Office of Germany (Destatis), on behalf of the Federal Ministry for Economic Affairs and Energy, compiled the Tourism Satellite System (TSA) in order to show the most important economic and environmental issues related to tourism. The reporting period extends from 2015-2019 and thus expands previous studies from the German Institute for Economic Research (DIW) and the Institute of Economic Structures Research (gws).

When calculating the TSA tables, it is important to make tourism more “visible” in the overall system of national accounts and environmental-economic accounts (UGR) and thus to facilitate its economic and ecological interpretation. The system of supply, use and input-output tables of the input-output calculation is helpful here, as it not only provides a sector-related representation, but also provides data for goods related to tourism. The TSA tables 1-7 are arranged according to product categories, which include goods and services that are particularly relevant to tourism. Under I) are the product groups defined internationally as “tourist” and under II) the categories that have been added specifically for Germany and have a particular relevance to tourism. Under III), all remaining tourism expenses are shown that were not made in product groups defined for tourism. In order to be considered a tourism product, either a significant proportion of the product must be sold to tourists, or a significant proportion of the tourism demand must fall on the product.

The calculation of the tourism-related environmental effects is mostly based on data sources from the Federal Statistical Office. These include, on the one hand, the TSA-tables created by the national accounts within the scope of the present project and, on the other hand, the established UGR data from the overall calculation systems for the use of energy and raw materials, as well as air emissions. The reporting horizon for the calculation of the tourism-related environmental effects covers the reporting years 2015 to 2019, although no results for the reporting year 2019 could yet be calculated for the modules raw material use and expenditure on environmental protection services.

This report is the short version of the more extensive background report and contains the most important results on the effects of tourism on the economy and sustainability. For this reason, a detailed description of the TSA methodology is forgone this version. Chapter 2 summarizes the results of the TSA tables with economic relevance. Chapter 3 describes the tourism-related environmental effects. Further results, methodological explanations and information on the project can be found in the long version of the report.

## 1.2 Important results

### **Tourist expenses of foreigners in Germany**

In 2019, foreign tourists spent EUR 46.9 billion on private and domestic business trips. Of this, 56 % or EUR 26.1 billion were accounted for by private travel and 44 % or EUR 20.7 billion by business travel. The majority was spent in the areas of accommodation (EUR 13.6 billion) and food and beverage serving services (EUR 10.8 billion), followed by air passenger transport services (EUR 7.9 billion). Between 2015 and 2019 tourist expenses of foreigners in Germany increased by 18 %.

### **Tourist expenses of residents in Germany**

In 2019 a total of around EUR 247.0 billion was spent on tourism by residents in Germany. At over EUR 197.6 billion, the volume of private travel is significantly larger than the EUR 31.3 billion that was spent on business travel. Furthermore, “remaining goods” represented the largest expenditure item for residents at EUR 46.6 billion. Overall, total spending by domestic tourists rose steadily from EUR 231.4 billion in 2015 to EUR 247.0 billion in 2019 - by 6.7 %. (See chapter 2.2)

### **Tourist expenses of residents abroad**

In 2019 tourism spending by residents abroad amounted to EUR 125.4 billion. Of this, 85 % or EUR 106.0 billion were accounted for by private travelers and 15 % or EUR 19.4 billion by business travelers. For private as well as business overnight guests, the expenditure for accommodation services are the largest expenditure position. For private day trippers it was the remaining goods. (See chapter 2.3)

### **Domestic tourist consumption**

Overall, accommodation (EUR 54.4 billion) and food and beverage serving services (EUR 57.3 billion), followed by sport, recreational and cultural services (EUR 29.7 billion), were particularly important for the German tourism industry. The product category “remaining goods” was the largest item with slightly more than 21 % of total domestic consumption. Over time, tourism expenditure in Germany rose from EUR 302.3 billion in 2015 to EUR 329.6 billion in 2019, thereby increased by EUR 27.2 billion or around 9 %. (See chapter 2.4)

### Output and production values of tourism and other sectors of the economy

For the reporting year 2019, the economic output was around EUR 6,304.8 billion, of which EUR 279.5 billion of production were destined for tourism. A further EUR 43.6 billion in imports were added to the tourism output. Tourism-relevant industries produced EUR 199.3 billion of the output intended for tourism, other industries EUR 80.2 billion. Most dependent on tourism were the accommodation industry with 95 % and the food and beverage service industry with 74 % of production. In the time series from 2015 to 2019, the total output in basic prices increased by 14 %, the tourism-related output by only 12 %. As a result, the tourism share has fallen from 4.3 % to 4.2 %. (See chapter 2.5)

### Tourism use table and gross value added

The total use of tourist goods and services in purchaser's prices in 2019 was estimated at EUR 356.7 billion. At EUR 233.5 billion, private consumption expenditures represent the bulk of the last use of tourist goods and services. The share of tourism-related GVA in total economic GVA was 3.99 %. In tourism-based economic sectors, the share of tourism was higher at 12.2 %; in other economic sectors it played a subordinate role for the GVA (1.4 %). In the time series between 2015 and 2019, the importance of tourism (measured in terms of GVA share) hardly changed. In 2015 the GVA share was 4.06 %, from 2016 to 2019 it was just under 4 percent. (See chapter 2.6)

### Employed persons connected to tourism

Overall, those in employment associated with tourism consumption accounted for 2.8 million in 2019, which corresponds to 6.1 % of the total number of persons in employment in Germany. In touristic industries, this share was 27 % (2.2 million) and in others it was 1.6 % (0.6 million). The results indicate that tourism contributed to the GVA (4 %), but that its relevance to the labor market was greater (6 %), due to the high number of people employed in the industries of accommodation and food and beverage serving services. The number of people in employment with a tourism-related background rose only slightly between 2015 and 2019, from 2.7 million to 2.8 million. (See chapter 2.7)

### Gross fixed capital formation related to tourism

In total, tourism investments in 2019 amounted to EUR 17.3 billion, which corresponds to 2.3 % of total German gross fixed capital formation. From 2015 to 2019, tourism-related gross fixed capital formation rose by 9.3 % from EUR 15.8 billion in 2015 to EUR 17.3 billion in 2019, after a high of EUR 17.5 billion in 2018. (See chapter 2.8)

### Tourism-related tax revenues and government expenditures

According to the calculation, the state receives income with possible tourism relation via current taxes in the amount of EUR 49.5 billion, which corresponds to 3.1 % of the total income and 6 % of current tax income. In the same year, the state spent EUR 15.9 billion on tourism. In the period from 2015 to 2019, the state's income with a possible tourism connection rose from EUR 48.9 billion to EUR 49.5 billion, which corresponds to an increase of 1.3 %. (See chapter 2.9)

### Indirect effects

**Production:** The direct production of the tourist products in demand amounting to EUR 279.5 billion in 2019 were linked to EUR 199.9 billion from products indirectly produced domestically. Thus, a total of EUR 479.4 billion of products were related to the tourism industry.

**GVA:** The economic importance of tourism in 2019, measured directly, was 3.99 % of gross value added. This number increases to a total of 6.96 % when the domestic intermediate supply is included.

**Employment:** Viewed directly, 2.8 million people were employed in tourism in 2019. A further 1.3 million people were indirectly employed. This means that more than 4 million people in employment were directly and indirectly dependent on tourism in Germany, which makes up 9.0 % of the total number employees. (See chapter 2.10)

### Tourism-related energy consumption

Following the Energy Accounts provided by the Environmental-Economic Accounts, Germany's final energy consumption in the reporting year 2019 amounted to 8.97 million terajoules (TJ). For the reporting year 2019, that tourism-related goods and services in Germany were produced using 298,824 TJ. In terms of the benchmark figure of the final energy consumption from the Energy Accounts, this means that around 3.3 % of Germany's energy consumption was spent on the production of tourism-related products. (See chapter 3.1)

### Tourism-related air emissions

Germany's greenhouse gas emissions in the reporting year 2019 amounted to around 949 million tons (t), measured in CO<sub>2</sub> equivalents. Overall, the greenhouse gas emissions for the production of tourism-related goods and services fell from 27.3 million tons of CO<sub>2</sub> equivalents in the reporting year 2015, to 24.6 million tons of CO<sub>2</sub> equivalents in 2019. This corresponds to approximately 2.6 % of the domestic greenhouse gas emissions.

In the area of air pollutant emissions in tourism, nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) in particular were caused by the manufacture of tourism products. The biggest driver for the emission of air pollutants was the provision of transport services. (See chapter 3.2)

### **Tourism-related raw material input**

Germany's total raw material input in the reporting year 2018 amounted to 3,014 million tons in raw material equivalents. In 2018, the demand for tourism-related goods and services in Germany was satisfied by the use of 100 million tons in raw material equivalents. As compared to the economy's total raw material input, this means that approximately 3.3 % of Germany's raw material input was related to tourism. (See chapter 3.3)

### **Tourism-related environmental protection expenditure**

Corporations in the tourism sector spent roughly EUR 1.9 billion on market-based environmental protection services in the reporting year 2018. Of this amount, EUR 1.4 billion were spent on water protection, or waste water management, and another EUR 535 million on waste management. In addition, the expenses by corporations in the tourism sector on environmental protection services increased by about 20 % between 2015 and 2018. (See chapter 3.4)

## 2 Tourism and Economy: Overview of TSA-Tables

The TSA tables aim to show the most important economic and environmental issues associated with tourism. In doing so, emphasis is placed on making them “visible” in the overall system of the national accounts and the environmental-economic accounts and thus facilitating their economic classification. The system of supply, use and input-output tables, which, in addition to a branch-related breakdown, also establishes the tourism reference for goods, is helpful in this regard.

TSA table 1 shows the tourism-related expenditures of foreigners in Germany. TSA table 2 contains the tourist expenditure of residents in Germany and TSA table 3 presents the tourist expenditure of residents abroad. This means that all tourism-related expenses by residents and foreigners that are essential for Germany are described in a uniform classification of goods.

The TSA tables 4 represent the complete domestic tourism demand and generate the transition from the system of tourism-oriented tables to the system of national accounts. Table 2.4-1 shows domestic tourist consumption, subdivided into foreigners and residents, and contains the “other” tourist consumption. “Other consumption” refers to services that are taken before the actual vacation. This includes sports equipment that was bought for a tourist activity, such as ski boots, tennis rackets, bicycles or even caravans or holiday apartments. The tourist expenditures of residents – according to the definition of national accounts – are shown for private trips and business trips broken down into overnight guests and day trippers. This considers how package tours are to be booked in the national accounts system.

Tables 5-10 refer to the national accounts and show the complex picture of the importance of tourism in economic detail. The non-tourism-related goods and industries are each summarized in one item. Table 2.5-1 shows the supply and output values of tourism and other economic sectors in detail. The uses of tourism products are diverse. In order to be able to represent the most important variables, several TSA tables 6 have been developed which show these facts. Table 2.6-1 shows the use of tourism products in purchaser’s prices. Value is placed on the presentation of the categories of last use and total intermediate consumption. Table 2.6-2 summarizes the production values, intermediate consumption and gross value added (GVA) for the tourist industries. Then, Table 2.7-1 contains the persons in employment and Table 2.8-1 the gross fixed capital formation (GCF) of the tourism and other branches of the economy. Table 2.9-1 shows the tax revenues and government expenditures associated with tourism and finally, Table 2.10-1 contains the indirect effects of the tourism industry on the other branches of the economy.

### 2.1 TSA 1 – Tourist Expenses of Foreigners in Germany at Purchaser’s Prices

The tourism industry is booming worldwide. In Germany, too, more foreign tourists used to come every year up to the corona pandemic. Table 2.1-1 shows tourism expenditure of foreigners in Germany for the reporting period of 2019. The columns first subdivide the tourist expenditures according to the type of trip, i.e. into private and business trips, in order to then show the expenditures of overnight guests, day trippers and their aggregates. The product categories are goods and services that are particularly relevant to tourism. The products listed under I) are those which were defined internationally, those under II) the categories supplemented especially for Germany and those under III) are any remaining tourist expenses. Together, we get a detailed picture of spending made by foreign and domestic tourists.

In 2019, foreign tourists spent EUR 46.9 billion on private and domestic business trips. Of this, 56 % or EUR 26.1 billion were accounted for by private travel and 44 % or EUR 20.7 billion by business travel.

For both private and business travelers, the spending of overnight guests was significantly higher than that of day trippers. When comparing expenditure by product group, further differences become apparent. As expected, the majority was spent in the areas of accommodation (EUR 13.6 billion) and food and beverage serving services (EUR 10.8 billion), followed by air passenger transport services (EUR 7.9 billion). “Shopping” also played a major role for the tourism industry, which is included in the “Remaining goods” category of the table and on which a total of EUR 6.1 billion was spent (cf. DIW Econ 2012, p. 34). This includes goods such as tobacco products, clothing, publishing, furniture, jewelry, musical instruments, sports equipment, toys, etc. The smallest items in this table are expenses for rental cars (EUR 242 million) and sports, recreational & cultural services (EUR 157 million). In the case of private travelers with overnight stays, the expenditures for accommodation services constituted the largest expenditure item at 41 % or EUR 9.3 billion. In comparison, for private day trippers it was the food and beverage serving services with a share of 44 % or EUR 1.5 billion. The largest expenditure item for business travelers with overnight stays was air passenger transport services with 39 % or EUR 7.0 billion and for business day trippers it was the expenditure for remaining services with a share of 40 % or EUR 1.0 billion.

Table 2.1-2 shows spending by foreign tourists in Germany as a time series for the years 2015 to 2019 by product group. Between 2015 and 2019, tourism spending increased by 17.7 %, with spending in 2019 being the highest at EUR 46.9 billion. One can also see that for most product categories, spending increased until 2019, only air passenger transport services and fuel increased until 2018 and then fell slightly again in 2019. All other tourism expenditures, however, continued to rise in 2019. In all years of the time series, it is visible that foreign tourists spent more than half of their tourism expenditures in Germany on accommodation and food and beverage serving services.



## 2.1-1 Tourist expenses of foreigners in Germany by type of trip, 2019

	Private Trips			Business Trips			Expenditure of foreigners in Germany Total
	Total	of which		Total	of which		
		Overnight guests	Day trippers		Overnight guests	Day trippers	
	Mill. Euro						
I) Internationally defined touristic products	20 504	18 065	2 440	15 351	14 375	976	35 855
1 – Accommodation services for visitors	9 263	9 263	–	4 288	4 288	–	13 551
2 – Food and beverage serving services	7 267	5 814	1 453	3 533	2 712	822	10 801
3 – Railway passenger services	192	154	38	181	145	36	373
4 – Road passenger transport services	719	490	228	95	41	54	814
5 – Water passenger transport services	1 056	410	645	134	119	15	1 190
6 – Air passenger transport services	842	842	–	7 038	7 038	–	7 880
7 – Transport equipment rental services	225	212	13	17	16	1	242
8 – Travel agencies and other reservation services	848	805	42	–	–	–	848
9 – Sport, recreational and cultural services	93	74	19	64	16	48	157
II) Other touristic products	1 102	916	185	1 101	925	177	2 203
10 – Health services	254	254	–	–	–	–	254
11 – Food	690	552	138	860	688	172	1 550
12 – Fuel	157	110	47	242	237	5	399
III) All remaining goods and services	4 541	3 857	684	4 285	2 888	1 398	8 826
13 – Remaining goods	3 296	2 868	429	2 805	2 440	365	6 101
14 – Remaining services	1 245	989	255	1 480	447	1 033	2 725
Total	26 147	22 838	3 309	20 737	18 187	2 551	46 884

There may be deviations in the totals due to rounding in the subtotals.

## 2.1-2 Tourist expenses of foreigners in Germany

	2015	2016	2017	2018	2019
	Mill. Euro				
<b>I) Internationally defined touristic products</b>	<b>30 322</b>	<b>32 078</b>	<b>33 953</b>	<b>35 209</b>	<b>35 855</b>
1 – Accommodation services for visitors	11 754	12 092	12 751	13 271	13 551
2 – Food and beverage serving services	9 596	9 869	10 324	10 584	10 801
3 – Railway passenger services	322	338	352	369	373
4 – Road passenger transport services	762	780	780	806	814
5 – Water passenger transport services	767	860	979	1 086	1 190
6 – Air passenger transport services	6 262	7 128	7 672	7 925	7 880
7 – Transport equipment rental services	133	176	201	241	242
8 – Travel agencies and other reservation services	613	719	759	772	848
9 – Sport, recreational and cultural services	113	115	134	154	157
<b>II) Other touristic products</b>	<b>1 967</b>	<b>2 019</b>	<b>2 077</b>	<b>2 137</b>	<b>2 203</b>
10 – Health services	249	241	231	248	254
11 – Food	1 313	1 371	1 451	1 471	1 550
12 – Fuel	405	406	395	418	399
<b>III) All remaining goods and services</b>	<b>7 546</b>	<b>7 978</b>	<b>8 479</b>	<b>8 676</b>	<b>8 826</b>
13 – Remaining goods	5 387	5 541	5 906	6 033	6 101
14 – Remaining services	2 159	2 437	2 573	2 642	2 725
<b>Total</b>	<b>39 835</b>	<b>42 074</b>	<b>44 509</b>	<b>46 022</b>	<b>46 884</b>

There may be deviations in the totals due to rounding in the subtotals.

### 2.2 TSA 2 – Tourist Expenses of Residents in Germany at Purchaser's Prices

Despite the large number of foreign tourists, tourist offers in Germany are predominantly used by residents. Table 2.2-1 shows the tourism expenditures of residents in Germany in 2019. First, we distinguish between private and business trips, then between overnight guests and day trippers. A total of around EUR 247.0 billion was spent on tourism residents in Germany. At over EUR 197.6 billion, the volume of private travel is significantly larger than the EUR 31.3 billion that was spent on business travel.

The columns in the table differentiate between the various tourism categories, while the rows provide information on goods and services that are characteristic of tourism.

Private overnight guests spent the most on touristic goods and services in 2019 with a total of EUR 123.6 billion, followed by private day trippers who came up to EUR 74.0 billion. As expected, the aggregate touristic consumption of business trips was many times lower, and with EUR 13.1 billion for overnight guests, around EUR 5 billion less than the expenditures of domestic business day trippers (EUR 18.2 billion). Residents preferred the areas of accommodation (EUR 36.7 billion) and food and beverage serving services (EUR 46.5 billion), followed by spending on sport, recreational and cultural services (EUR 18.5 billion). In addition, air and road passenger transport services were also relatively important for residents (EUR 14.6 billion and EUR 14.3 billion). Furthermore, “remaining goods” represented the largest expenditure item for residents at EUR 46.6 billion. This includes the purchase of goods, such as clothing, jewelry or publishing products.

The time series from 2015 to 2019 (see Table 2.2-2) shows the aggregated annual expenditures by domestic tourists in Germany. You can see that spending on most product categories increased through 2019. By contrast, tourism consumption in the areas of air and road passenger transport services, as well as fuel fell between 2015 and 2019. Overall, total spending by domestic tourists rose steadily from EUR 231.4 billion in 2015 to EUR 247.0 billion in 2019 by 6.7 %.

## 2.2-1 Tourist expenses of residents in Germany by type of trip, 2019

	Private Trips			Business Trips			Domestic expenses of outbound travellers	Expenditures of residents in Germany Total
	Total	of which		Total	of which			
		Overnight guests	Day trippers		Overnight guests	Day trippers		
	Mill. Euro							
I) Internationally defined touristic products	115 278	79 972	35 306	16 373	8 603	7 770	17 141	148 793
1 – Accommodation services for visitors	34 854	34 854	–	1 881	1 881	–	–	36 735
2 – Food and beverage serving services	39 088	20 822	18 266	7 459	3 039	4 420	–	46 547
3 – Railway passenger services	3 058	2 477	580	639	338	301	134	3 831
4 – Road passenger transport services	12 436	5 633	6 803	1 354	539	815	535	14 326
5 – Water passenger transport services	1 705	1 389	316	0	–	–	175	1 880
6 – Air passenger transport services	5 361	5 361	–	967	404	564	8 229	14 558
7 – Transport equipment rental services	1 328	513	815	1 020	667	353	296	2 644
8 – Travel agencies and other reservation services	853	853	–	–	740	399	7 772	8 625
9 – Sport, recreational and cultural services	16 595	8 069	8 526	1 913	995	919	–	18 508
II) Other touristic products	27 432	16 607	10 825	8 417	2 416	6 001	453	36 302
10 – Health services	7 873	7 873	–	–	–	–	–	7 873
11 – Food	10 902	6 382	4 521	1 504	506	999	–	12 406
12 – Fuel	8 657	2 353	6 304	6 912	1 910	5 002	453	16 022
III) All remaining goods and services	54 913	27 020	27 893	6 529	2 053	4 477	448	61 891
13 – Remaining goods	41 304	17 053	24 251	5 186	1 593	3 593	149	46 639
14 – Remaining services	13 609	9 967	3 642	1 344	460	884	299	15 252
Total	197 624	123 600	74 024	31 319	13 072	18 248	18 042	246 985

There may be deviations in the totals due to rounding in the subtotals.

## 2.2-2 Tourist expenses of residents in Germany

	2015	2016	2017	2018	2019
	Mill. Euro				
<b>I) Internationally defined touristic products</b>	<b>136 422</b>	<b>137 641</b>	<b>142 521</b>	<b>145 756</b>	<b>148 793</b>
1 – Accommodation services for visitors	30 992	31 881	33 398	35 009	36 735
2 – Food and beverage serving services	41 206	42 096	45 143	46 494	46 547
3 – Railway passenger services	3 268	3 446	3 466	3 697	3 831
4 – Road passenger transport services	16 005	14 976	14 927	14 465	14 326
5 – Water passenger transport services	1 320	1 660	1 544	1 641	1 880
6 – Air passenger transport services	16 747	15 363	14 292	13 954	14 558
7 – Transport equipment rental services	1 805	2 026	2 229	2 440	2 644
8 – Travel agencies and other reservation services	7 606	8 332	9 334	9 310	9 764
9 – Sport, recreational and cultural services	17 473	17 860	18 188	18 747	18 508
<b>II) Other touristic products</b>	<b>38 053</b>	<b>36 350</b>	<b>36 193</b>	<b>35 979</b>	<b>36 302</b>
10 – Health services	6 414	6 913	7 425	7 478	7 873
11 – Food	11 483	11 821	12 103	12 418	12 406
12 – Fuel	20 156	17 616	16 665	16 082	16 022
<b>III) All remaining goods and services</b>	<b>56 953</b>	<b>58 679</b>	<b>60 277</b>	<b>62 989</b>	<b>61 891</b>
13 – Remaining goods	44 213	44 826	45 313	47 728	46 639
14 – Remaining services	12 740	13 853	14 964	15 261	15 252
<b>Total</b>	<b>231 428</b>	<b>232 670</b>	<b>238 991</b>	<b>244 724</b>	<b>246 985</b>

There may be deviations in the totals due to rounding in the subtotals.

### 2.3 TSA 3 – Tourist Expenses of Residents Abroad at Purchaser's Prices

Another part of the economic factor tourism is the expenditures of residents during their tourist trips abroad. Table 2.3-1 contains the tourist expenditures of residents abroad at purchaser's prices differentiated according to type of trip and divided into tourist product groups. In 2019, tourism spending by residents abroad amounted to EUR 125.4 billion. Of this, 85 % or EUR 106.0 billion were accounted for by private travelers and 15 % or EUR 19.4 billion by business travelers.

For both private and business travelers, the spending of overnight guests was significantly higher than that of day trippers. The breakdown of tourism expenditures by product group shows further differences in spending behavior depending on the types of travel. For private as well as business overnight guests, the expenditure for accommodation services was the largest expenditure position with 29 % and 35 % respectively. For private day trippers, on the other hand, it was the remaining goods with 34 % or EUR 2.6 billion and for business day trippers it was expenditure on fuel with 29 % or EUR 74.0 million.

When analyzing the time series of TSA 3, one special feature must be taken into account. Due to a methodological change in the 2018 tourism statistics, the data of the time series are only comparable to a limited extent. Table 2.3-2 shows the results of tourism spending by residents abroad for the reporting years 2015 to 2019, given out separately according to tourism product groups. In the period from 2015 to 2019, tourism spending by residents abroad rose by 52 % from EUR 82.5 billion to EUR 125.4 billion. The largest increase took place between 2017 and 2018, when domestic spending abroad increased by EUR 27.2 billion. Expenditures for health services increased the most proportionally by 65 %, in absolute figures however, only by EUR 0.4 billion. In contrast, the greatest absolute growth was recorded in accommodation services (EUR 12.2 billion, 53 %) and food and beverage serving services (EUR 8.4 billion, 52 %).

## 2.3.1 Tourist expenses of residents abroad by type of trip, 2019

	Private Trips			Business Trips			Expenditure of residents abroad Total
	Total	of which		Total	of which		
		Overnight guests	Day trippers		Overnight guests	Day trippers	
	Mill. Euro						
I) Internationally defined touristic products	76 350	72 589	3 761	15 257	15 146	111	91 607
1 – Accommodation services for visitors	28 525	28 525	–	6 780	6 780	–	35 304
2 – Food and beverage serving services	21 189	19 292	1 897	3 448	3 386	63	24 638
3 – Railway passenger services	109	96	13	55	50	5	163
4 – Road passenger transport services	3 045	2 823	223	672	658	14	3 717
5 – Water passenger transport services	–	–	–	–	–	–	–
6 – Air passenger transport services	14 376	13 653	722	3 197	3 174	24	17 573
7 – Transport equipment rental services	–	–	–	–	–	–	–
8 – Travel agencies and other reservation services	–	–	–	–	–	–	–
9 – Sport, recreational and cultural services	9 106	8 201	906	1 105	1 099	7	10 212
II) Other touristic products	8 518	7 699	818	1 074	994	80	9 591
10 – Health services	1 097	1 097	–	–	–	–	1 097
11 – Food	5 508	4 899	609	685	679	6	6 193
12 – Fuel	1 913	1 704	209	388	315	74	2 301
III) All remaining goods and services	21 150	18 269	2 880	3 021	2 961	60	24 171
13 – Remaining goods	17 691	15 134	2 558	2 558	2 505	54	20 250
14 – Remaining services	3 458	3 136	323	463	456	7	3 921
Total	106 017	98 558	7 459	19 352	19 101	251	125 369

There may be deviations in the totals due to rounding in the subtotals.

## 2.3.2 Tourist expenses of residents abroad

	2015	2016	2017	2018	2019
	Mill. Euro				
<b>I) Internationally defined touristic products</b>	<b>60 165</b>	<b>61 039</b>	<b>68 422</b>	<b>88 440</b>	<b>91 607</b>
1 – Accommodation services for visitors	23 056	23 254	26 049	33 922	35 304
2 – Food and beverage serving services	16 238	16 572	18 593	23 904	24 638
3 – Railway passenger services	116	114	126	153	163
4 – Road passenger transport services	2 472	2 501	2 800	3 579	3 717
5 – Water passenger transport services	–	–	–	–	–
6 – Air passenger transport services	11 606	11 737	13 142	16 917	17 573
7 – Transport equipment rental services	–	–	–	–	–
8 – Travel agencies and other reservation services	–	–	–	–	–
9 – Sport, recreational and cultural services	6 677	6 862	7 711	9 966	10 212
<b>II) Other touristic products</b>	<b>6 286</b>	<b>6 452</b>	<b>7 258</b>	<b>9 354</b>	<b>9 591</b>
10 – Health services	666	701	797	1 092	1 097
11 – Food	4 067	4 178	4 693	6 041	6 193
12 – Fuel	1 552	1 573	1 768	2 221	2 301
<b>III) All remaining goods and services</b>	<b>16 081</b>	<b>16 471</b>	<b>18 473</b>	<b>23 516</b>	<b>24 171</b>
13 – Remaining goods	13 513	13 837	15 514	19 696	20 250
14 – Remaining services	2 568	2 633	2 958	3 820	3 921
<b>Total</b>	<b>82 532</b>	<b>83 962</b>	<b>94 153</b>	<b>121 310</b>	<b>125 369</b>

There may be deviations in the totals due to rounding in the subtotals.

## 2.4 TSA 4 – Domestic tourist Consumption at Purchaser's Prices

In order to record the extent of tourist consumption in Germany, the expenditures of foreign and domestic tourists were combined. TSA table 4 shows the total domestic tourist demand at purchaser's prices. The columns in table 2.4-1 differentiate between the various categories of tourists, while the rows provide information on the expenditure on goods and services. "Other consumption" refers to goods and services purchased before the actual vacation. This includes sports equipment that was bought for a tourist activity such as ski boots, tennis rackets, bicycles or even caravans or expenses for holiday apartments (including imputed rents).

Total domestic tourism consumption in 2019 amounted to EUR 329.6 billion, direct expenditure (excluding other consumption) amounted to EUR 293.9 billion, of which around 84 % (EUR 247.0 billion) came from residents. The different spending structures of residents and foreigners are shown in Table 2.4-1. As expected, foreign guests used 29 % (EUR 13.6 billion) of their spending on accommodation services, a larger proportion than residents (15 %, EUR 36.7 billion). In addition, foreign tourists used relatively more air and water passenger transport services (17 % and 3 % compared to 6 % and 1 %), which is also reflected in fuel expenditure (1 % compared to 6 %). Conversely, domestic residents are particularly interested in sport, recreational and cultural services, on which EUR 18.5 billion was spent in 2019, while foreign tourism consumption for these only amounted to EUR 157 million.

Overall, accommodation (EUR 54.4 billion) and food and beverage serving services (EUR 57.3 billion), followed by sport, recreational and cultural services (EUR 29.7 billion), were particularly important for the German tourism industry. The product category "remaining goods" was the largest item with slightly more than 21 % of total domestic consumption. It includes the purchase of goods from the retail trade that are not mainly made by tourists, such as bags, furniture, clothing, etc. and emphasizes the importance of "shopping" for the economy.

Over time, tourism expenditure in Germany rose from EUR 302.3 billion in 2015 to EUR 329.6 billion in 2019, thereby increased by EUR 27.2 billion or around 9 %. The internationally defined tourism products have risen by around 11 %, most of which were the transport equipment rental services (49 %), water passenger transport services (47 %) and the expenses for travel agencies and other reservation services (29 %); on the other hand, spending on road passenger transport services has continuously decreased (– 10 %). Expenditures for other touristic products (– 4 %) were also declining slightly, the main reason being the falling spending on fuel (– 20 %). The tourist expenditures for all remaining goods and services increased by 11 %.

### 2.4-1 Domestic tourist consumption at purchaser's prices according to tourist categories, 2019

	of which				Tourist domestic consumption Total
	Tourist domestic expenditure			Other consumption	
	of which		Total		
	Foreigners	Residents			
	Mill. Euro				
I) Internationally defined touristic products	35 855	148 793	184 648	15 120	199 768
1 – Accommodation services for visitors	13 551	36 735	50 287	4 078	54 365
a) Conventional accommodation services	13 551	36 735	50 287	–	50 287
b) Imputed accommodation services	–	–	–	4 078	4 078
2 – Food and beverage serving services	10 801	46 547	57 348	–	57 348
3 – Railway passenger services	373	3 831	4 204	–	4 204
4 – Road passenger transport services	814	14 326	15 140	–	15 140
5 – Water passenger transport services	1 190	1 880	3 070	–	3 070
6 – Air passenger transport services	7 880	14 558	22 438	–	22 438
7 – Transport equipment rental services	242	2 644	2 886	–	2 886
8 – Travel agencies and other reservation services	848	9 764	10 612	–	10 612
9 – Sport, recreational and cultural services	157	18 508	18 665	11 042	29 706
II) Other touristic products	2 203	36 302	38 505	–	38 505
10 – Health services	254	7 873	8 127	–	8 127
11 – Food	1 550	12 406	13 957	–	13 957
12 – Fuel	399	16 022	16 421	–	16 421
III) All remaining goods and services	8 826	61 891	70 717	20 569	91 285
13 – Remaining goods	6 101	46 639	52 740	16 676	69 416
14 – Remaining services	2 725	15 252	17 977	3 892	21 869
Total	46 884	246 985	293 870	35 689	329 558

There may be deviations in the totals due to rounding in the subtotals.

### 2.4-2 Domestic tourist consumption at purchaser's prices

	2015	2016	2017	2018	2019
	Mill. Euro				
<b>I) Internationally defined touristic products</b>	<b>180 137</b>	<b>183 189</b>	<b>190 779</b>	<b>196 100</b>	<b>199 768</b>
1 – Accommodation services for visitors	46 381	47 711	50 001	52 248	54 365
2 – Food and beverage serving services	50 803	51 965	55 467	57 078	57 348
3 – Railway passenger services	3 590	3 784	3 818	4 066	4 204
4 – Road passenger transport services	16 767	15 756	15 706	15 271	15 140
5 – Water passenger transport services	2 087	2 520	2 523	2 727	3 070
6 – Air passenger transport services	23 009	22 491	21 964	21 879	22 438
7 – Transport equipment rental services	1 938	2 203	2 451	2 721	2 886
8 – Travel agencies and other reservation services	8 219	9 051	10 093	10 082	10 612
9 – Sport, recreational and cultural services	27 344	27 709	28 756	30 027	29 706
<b>II) Other touristic products</b>	<b>40 020</b>	<b>38 369</b>	<b>38 270</b>	<b>38 115</b>	<b>38 505</b>
10 – Health services	6 663	7 155	7 656	7 726	8 127
11 – Food	12 796	13 192	13 554	13 890	13 957
12 – Fuel	20 561	18 022	17 060	16 500	16 421
<b>III) All remaining goods and services</b>	<b>82 191</b>	<b>85 397</b>	<b>88 162</b>	<b>92 245</b>	<b>91 285</b>
13 – Remaining goods	63 890	65 513	66 903	70 586	69 416
14 – Remaining services	18 301	19 884	21 259	21 659	21 869
<b>Total</b>	<b>302 348</b>	<b>306 955</b>	<b>317 211</b>	<b>326 461</b>	<b>329 558</b>

There may be deviations in the totals due to rounding in the subtotals.

### 2.5 TSA 5 – Output and Production Values of Tourism and other Sectors of the Economy at basic Prices

Tourist expenditures stand in juxtaposition to tourism-related production. Which sectors of the economy are dependent on tourism expenditure? And to what extent? TSA - Table 5 shows the output and mainly the production from a touristic viewpoint. The output in Germany is determined by economic sector and by product group.

For the reporting year 2019, the economic output was around EUR 6,304.8 billion, of which EUR 279.5 billion were destined for tourism (see Table 2.5-1). A further EUR 43.6 billion in imports were added to the tourism volume, which corresponds to 3 % of the total import volume.

Tourism-relevant industries produced EUR 199.3 billion of the output intended for tourism, other industries EUR 80.2 billion. This includes goods and services that are consumed by tourists but come from non-tourist industries, such as clothing or jewelry.

As expected, most dependent on tourism were the accommodation industry with 95 % and the food and beverage service industry with 74 % of production. The relatively low tourism share of 4 % in renting and leasing of cars and light motor vehicles (car rental) was due to the fact that the leasing business is part of the economic sector and makes up the majority of it. The importance of tourism in water transport was also low at 9 %, since the transport of goods is of great economic importance here. In air transport, however, 66 % of production was due to tourism.

Table 2.5-1 shows which goods and services were produced by the tourist economic sectors. For example, the food and beverage service industry also produces food valued at EUR 6 million as a secondary activity, which it sells to tourists.

At the end of TSA table 5 one can see how important the domestic tourism offer is. The output for tourism purposes – production and imports – amounted to 4.2 % of the total output in 2019 (EUR 323.1 billion).

Table 2.5-2 shows the results of the calculations of tourism-relevant output in Germany, regardless of the economic sector in which it was generated, for the reporting years 2015 to 2019 in accordance with the national accounts status from summer 2020. EUR 288.9 billion in 2015 to EUR 323.1 billion in 2019, the tourism share developed in an opposite fashion. In 2015, the share for tourism purposes was calculated at 4.30 %, afterwards the share decreased slightly in 2018 (4.19 %) and then rose again to 4.22 % in 2019. I. e. even if the tourist supply grew, this growth was less than the growth of non-tourist goods.



2.5-1 Output of tourism and other branches of the economy at basic prices 2019

	Production for tourist purposes by industry												Total of tourist industries	Other industries	Total output for tourist purposes	Imports <sup>1</sup>	Output for tourist purposes	Total output	Share (for tourist purposes)
	Accommodation	Real estate activities	Food and beverage service activities	Rail transport	Road transport	Water transport	Air transport	Renting and leasing of cars and light motor vehicles	Travel agencies and tour operator activities	Sport, recreational and cultural services	Other economic services	Human health activities							
	Mill. Euro																		
I) Internationally defined touristic products	35 716	4 077	49 310	3 529	16 771	2 116	17 400	2 474	33 070	20 353	0	0	184 818	7 217	192 035	19 587	211 622	614 494	34,44
1 – Accommodation services for visitors	35 716	4 077	0	0	0	0	0	0	0	0	0	0	39 793	421	40 214	10 186	50 400	337 009	14,96
a) Conventional accommodation services	35 716	0	0	0	0	0	0	0	0	0	0	0	35 716	421	36 137	10 186	46 323	46 882	98,81
b) Imputed accommodation services	0	4 077	0	0	0	0	0	0	0	0	0	0	4 077	0	4 077	0	4 077	290 127	1,41
2 – Food and beverage serving services	0	0	49 310	0	0	0	0	0	0	0	0	0	49 310	0	49 310	2 501	51 812	56 265	92,08
3 – Railway passenger services	0	0	0	3 529	0	0	0	0	0	0	0	0	3 529	0	3 529	293	3 822	4 916	77,74
4 – Road passenger transport services	0	0	0	0	16 743	0	0	0	39	0	0	0	16 782	146	16 928	73	17 001	46 670	36,43
5 – Water passenger transport services	0	0	0	0	0	2 116	0	0	0	0	0	0	2 116	0	2 116	865	2 981	5 581	53,42
6 – Air passenger transport services	0	0	0	0	0	0	17 400	0	0	0	0	0	17 400	0	17 400	3 915	21 315	23 591	90,35
7 – Transport equipment rental services	0	0	0	0	28	0	0	2 474	0	0	0	0	2 502	32	2 534	144	2 678	46 471	5,76
8 – Travel agencies and other reservation services	0	0	0	0	0	0	0	0	33 031	0	0	0	33 031	0	33 031	192	33 223	33 223	100,00
9 – Sport, recreational and cultural services	0	0	0	0	0	0	0	0	0	20 353	0	0	20 353	6 618	26 972	1 419	28 390	60 768	46,72
II) Other touristic products	2	0	6	0	0	0	0	0	0	0	0	8 108	8 116	11 657	19 773	6 410	26 184	482 453	5,43
10 – Health services	0	0	0	0	0	0	0	0	0	0	0	8 108	8 108	0	8 108	3	8 111	118 980	6,82
11 – Food	2	0	6	0	0	0	0	0	0	0	0	0	8	6 496	6 504	2 753	9 257	310 856	2,98
12 – Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	5 161	5 161	3 655	8 816	52 617	16,76
III) All remaining goods and services	14	262	146	93	590	255	81	285	1 414	145	1 621	1 442	6 349	61 319	67 668	17 651	85 319	6 566 209	1,30
13 – Remaining goods	1	1	1	0	10	5	1	2	0	10	2	3	35	32 087	32 122	14 964	47 086	3 176 801	1,48
14 – Remaining services	14	260	145	93	581	249	80	283	1 414	135	1 619	1 439	6 313	29 232	35 545	2 688	38 233	3 389 408	1,13
Production for tourist purposes	35 733	4 339	49 462	3 623	17 362	2 371	17 481	2 760	34 484	20 498	1 621	9 551	199 283	80 193	279 476	43 649	323 125	–	–
Total production	37 530	440 756	67 077	13 098	100 437	27 229	26 670	69 090	36 234	56 684	65 047	251 237	1 191 089	5 113 754	6 304 843	1 358 313	7 663 156	–	–
	%																		
Touristic share	95,21	0,98	73,74	27,66	17,29	8,71	65,54	3,99	95,17	36,16	2,49	3,80	16,73	1,57	4,43	3,21	4,22	–	–

There may be deviations in the totals due to rounding in the subtotals.

1 (for tourist purposes) (cif) without consumption spending of residents in the rest of the world.

2.5-2 Output of total economy and tourism share at basic prices

	2015			2016			2017			2018			2019		
	Output for tourist purposes	Total output	Share (for tourist purposes)	Output for tourist purposes	Total output	Share (for tourist purposes)	Output for tourist purposes	Total output	Share (for tourist purposes)	Output for tourist purposes	Total output	Share (for tourist purposes)	Output for tourist purposes	Total output	Share (for tourist purposes)
	Mill. Euro		%	Mill. Euro		%	Mill. Euro		%	Mill. Euro		%	Mill. Euro		%
<b>I) Internationally defined touristic products</b>	<b>187 869</b>	<b>545 453</b>	<b>34,44</b>	<b>189 939</b>	<b>561 070</b>	<b>33,85</b>	<b>199 639</b>	<b>582 080</b>	<b>34,30</b>	<b>205 497</b>	<b>602 520</b>	<b>34,11</b>	<b>211 622</b>	<b>614 494</b>	<b>34,44</b>
1 – Accommodation services for visitors	43 140	304 458	14,17	44 441	312 736	14,21	46 572	322 518	14,44	48 630	332 362	14,63	50 400	337 009	14,96
a) Conventional accommodation services	39 508	39 980	98,82	40 706	41 184	98,84	42 723	43 115	99,09	44 664	45 146	98,93	46 323	46 882	98,81
b) Imputed accommodation services	3 632	264 478	1,37	3 735	271 552	1,38	3 849	279 403	1,38	3 966	287 216	1,38	4 077	290 127	1,41
2 – Food and beverage serving services	45 390	46 871	96,84	46 331	48 525	95,48	49 611	51 696	95,97	51 143	53 670	95,29	51 812	56 265	92,08
3 – Railway passenger services	3 248	4 297	75,58	3 421	4 414	77,51	3 466	4 390	78,94	3 696	4 719	78,33	3 822	4 916	77,74
4 – Road passenger transport services	15 416	40 979	37,62	14 592	43 062	33,89	14 617	43 618	33,51	14 231	45 421	31,33	17 001	46 670	36,43
5 – Water passenger transport services	2 016	3 705	54,42	2 439	4 002	60,95	2 444	4 716	51,82	2 643	5 270	50,15	2 981	5 581	53,42
6 – Air passenger transport services	21 899	24 743	88,51	21 420	23 889	89,67	20 841	22 844	91,23	20 715	22 967	90,19	21 315	23 591	90,35
7 – Transport equipment rental services	1 820	40 101	4,54	2 082	42 469	4,90	2 306	43 354	5,32	2 545	45 933	5,54	2 678	46 471	5,76
8 – Travel agencies and other reservation services	29 103	29 103	100,00	28 918	28 918	100,00	32 369	32 369	100,00	33 279	33 279	100,00	33 223	33 223	100,00
9 – Sport, recreational and cultural services	25 837	51 196	50,47	26 294	53 055	49,56	27 414	56 576	48,46	28 615	58 899	48,58	28 390	60 768	46,72
<b>II) Other touristic products</b>	<b>24 204</b>	<b>437 693</b>	<b>5,53</b>	<b>23 771</b>	<b>441 763</b>	<b>5,38</b>	<b>24 271</b>	<b>469 231</b>	<b>5,17</b>	<b>24 745</b>	<b>477 261</b>	<b>5,18</b>	<b>26 184</b>	<b>482 453</b>	<b>5,43</b>
10 – Health services	6 650	100 685	6,60	7 142	105 034	6,80	7 641	109 158	7,00	7 711	113 554	6,79	8 111	118 980	6,82
11 – Food	8 368	288 411	2,90	8 681	294 137	2,95	8 918	314 650	2,83	9 152	309 660	2,96	9 257	310 856	2,98
12 – Fuel	9 186	48 597	18,90	7 949	42 592	18,66	7 711	45 423	16,98	7 882	54 047	14,58	8 816	52 617	16,76
<b>III) All remaining goods and services</b>	<b>76 871</b>	<b>5 732 242</b>	<b>1,34</b>	<b>80 220</b>	<b>5 902 717</b>	<b>1,36</b>	<b>82 862</b>	<b>6 218 058</b>	<b>1,33</b>	<b>86 462</b>	<b>6 473 447</b>	<b>1,34</b>	<b>85 319</b>	<b>6 566 209</b>	<b>1,30</b>
13 – Remaining goods	42 529	2 818 277	1,51	44 463	2 880 185	1,54	45 414	3 066 666	1,48	48 042	3 189 230	1,51	47 086	3 176 801	1,48
14 – Remaining services	34 342	2 913 965	1,18	35 756	3 022 532	1,18	37 448	3 151 392	1,19	38 420	3 284 217	1,17	38 233	3 389 408	1,13
<b>Total</b>	<b>288 944</b>	<b>6 715 387</b>	<b>4,30</b>	<b>293 930</b>	<b>6 905 550</b>	<b>4,26</b>	<b>306 771</b>	<b>7 269 369</b>	<b>4,22</b>	<b>316 704</b>	<b>7 553 228</b>	<b>4,19</b>	<b>323 125</b>	<b>7 663 156</b>	<b>4,22</b>

There may be deviations in the totals due to rounding in the subtotals.

## 2.6 TSA 6 – Tourism Use Table

### Use

To organize the touristic monetary flows in the economy, the tourist use table is suitable. A use table describes the use flows of the economy, namely the intermediate consumption according to branches of the economy and individual categories of the last use. Table 2.6-1 is the central table of the entire TSA system and contains mentioned last, tourist use at purchaser's prices of the tourist product classes in millions of EUR. Each category is divided into total use and tourism use.

The total use of tourist goods and services in purchaser's prices in 2019 was estimated at EUR 356.7 billion. At EUR 233.5 billion, private consumption expenditures of private, domestic households represents the bulk of the last use of tourist goods and services. Also, tourism products to the value of EUR 20.7 billion were exported. In addition to non-profit institutions serving households (NPISH) (EUR 0.3 billion), the state in particular accounts for EUR 10.6 billion or 36 % of the total tourist use in the sports, recreational and cultural services. In the case of a swimming pool, for example, the NPISH would cover their club costs, while the state would subsidize tickets and renovations.

### Gross Value Added

The importance of tourism for the German economy is measured as the share of tourism-specific GVA in total GVA. Table 2.6-2 shows output at basic prices, intermediate consumption at purchaser's prices, GVA and the tourism share of GVA for each sector of the economy. For example, in 2019 the accommodation industry required a total of EUR 18.5 billion in intermediate consumption to create EUR 35.7 billion in output. The GVA was EUR 17.2 billion, which corresponded to a GVA ratio of 48 %. The importance of tourism for the economic sector was capital, as 94 % of GVA could be traced back to it. The remaining 6 % could have stemmed from hotel stays of a non-tourist nature, for example. Overall, the share of tourism-related GVA in total economic GVA was 4 %. If one examines tourism-based economic sectors, the share of tourism was higher at 12 %; in other economic sectors it played a subordinate role for the GVA (1 %).

As expected, tourists were responsible for the majority of GVA in the travel agencies and tour operator activities sector, accounting for 94 %. The least significant – out of the selected economic sectors – was tourism with 4 % in human health activities and 2 % of GVA in the provision of other economic services. Also, in the car rental industry, tourism accounted for a relatively low share of GVA with 4 %. The main reason for this was that this branch of industry also includes the leasing business, which is, however, viewed as non-touristy in the TSA calculation.

From 2015 to 2019 (Table 2.6-3), tourism-related GVA rose continuously from EUR 110.5 billion to EUR 123.8 billion. The output, intermediate consumption and GVA for the economy as a whole and tourism developed parallel to each other. In 2015 the GVA share was 4.06 %, from 2016 to 2019 it was just under 4 percent. The largest absolute increase of the three values was achieved from 2016 to 2017, when tourism GVA rose by around EUR 4 billion.

2.6-1 Use of tourist products at purchaser's prices, 2019

	Intermediate consumption		Final uses of goods														Final uses		Total uses	
			Final consumption expenditure of private, domestic households		Final consumption expenditure of non-profit institutions serving household		Government final consumption expenditure		Machinery, equipment and other fixed assets		Construction		Changes in inventories, acquisitions less disposals of valuables and statistical difference		Exports, fob					
	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism
	Mill. Euro																			
I) Internationally defined touristic products	117 578	50 193	476 583	150 289	2 365	317	16 937	10 629	0	0	0	0	713	95	16 838	15 351	513 436	176 681	631 014	226 874
1 – Accommodation services for visitors	15 534	15 495	321 218	34 581	0	0	0	0	0	0	0	0	0	0	4 376	4 288	325 594	38 870	341 128	54 365
a) Conventional accommodation services	15 534	15 495	30 995	30 503	0	0	0	0	0	0	0	0	0	0	4 376	4 288	35 371	34 791	50 905	50 287
b) Imputed accommodation services	0	0	290 223	4 078	0	0	0	0	0	0	0	0	0	0	0	0	290 223	4 078	290 223	4 078
2 – Food and beverage serving services	10 118	9 725	47 662	44 090	0	0	0	0	0	0	0	0	0	0	4 460	3 533	52 121	47 623	62 239	57 348
3 – Railway passenger services	2 534	1 861	2 519	2 161	0	0	0	0	0	0	0	0	0	0	320	181	2 840	2 343	5 373	4 204
4 – Road passenger transport services	17 415	6 200	23 562	8 844	0	0	465	0	0	0	0	0	0	0	280	95	24 307	8 940	41 722	15 140
5 – Water passenger transport services	1 264	542	4 328	2 393	0	0	0	0	0	0	0	0	0	0	148	134	4 476	2 528	5 741	3 070
6 – Air passenger transport services	9 585	9 069	9 205	6 331	0	0	0	0	0	0	0	0	0	0	6 218	7 038	15 423	13 368	25 008	22 438
7 – Transport equipment rental services	42 946	1 694	3 690	1 175	0	0	0	0	0	0	0	0	0	0	977	17	4 667	1 192	47 612	2 886
8 – Travel agencies and other reservation services	3 660	3 660	34 057	34 057	0	0	0	0	0	0	0	0	0	0	0	0	34 057	34 057	37 718	37 718
9 – Sport, recreational and cultural services	14 522	1 945	30 341	16 656	2 365	317	16 472	10 629	0	0	0	0	713	95	60	64	49 951	27 761	64 473	29 706
II) Other touristic products	198 195	9 028	296 518	28 375	0	0	95 510	0	257	0	0	0	– 17 058	0	84 583	1 101	459 810	29 477	658 005	38 505
10 – Health services	6 717	79	18 500	8 048	0	0	94 337	0	0	0	0	0	0	0	90	0	112 927	8 048	119 644	8 127
11 – Food	128 150	1 720	226 415	11 377	0	0	1 173	0	257	0	0	0	2 961	0	75 952	860	306 758	12 237	434 908	13 957
12 – Fuel	63 328	7 229	51 603	8 950	0	0	0	0	0	0	0	0	– 20 019	0	8 541	242	40 125	9 192	103 453	16 421
III) All remaining goods and services	2 882 912	14 583	947 410	54 839	48 858	215	592 089	0	374 034	8 486	373 695	8 831	6 071	45	1 491 961	4 285	3 834 118	76 702	6 717 030	91 285
13 – Remaining goods	1 377 144	7 952	543 442	44 974	0	0	46 917	0	240 280	6 384	305 541	7 220	14 258	81	1 241 372	2 805	2 391 810	61 465	3 768 955	69 416
14 – Remaining services	1 505 768	6 631	403 968	9 865	48 858	215	545 172	0	133 754	2 102	68 154	1 611	– 8 187	-36	250 589	1 480	1 442 308	15 238	2 948 076	21 869
Total	3 198 685	73 804	1 720 510	233 503	51 223	532	704 536	10 629	374 291	8 486	373 695	8 831	– 10 274	141	1 593 382	20 737	4 807 364	282 860	8 006 049	356 664

There may be deviations in the totals due to rounding in the subtotals.

## 2.6-2 Gross value added for tourism products by industry, 2019

	Tourist industries												Total of tourist industries	Other industries	Economic total	
	Accommo- dation	Real estate activities	Food and beverage service activities	Rail transport	Road transport	Water transport	Air transport	Renting and leasing of cars and light motor vehicles	Travel agencies and tour operator activities	Sport, recreational and cultural services	Other economic services	Human health activities			Total	of which tourism
	Mill. Euro															
I Output	35 733	4 339	49 462	3 623	17 362	2 371	17 481	2 760	34 484	20 498	1 621	9 551	199 283	80 193	6 304 843	279 476
II Total intermediate consumption	18 486	197	25 124	2 783	8 601	1 860	12 704	797	27 251	7 674	867	3 064	109 437	46 234	3 198 686	155 670
I–II Gross value added	17 247	4 142	24 338	839	8 760	511	4 777	1 962	7 233	12 824	754	6 487	89 846	33 959	3 106 157	123 805
	%															
Share of tourism of GVA	94	1	73	27	18	8	63	4	94	36	2	4	12	1	–	4

There may be deviations in the totals due to rounding in the subtotals.

## 2.6-3 Gross value added for tourism products and total

	2015		2016		2017		2018		2019	
	Economic total	of which tourism	Economic total	of which tourism	Economic total	of which tourism	Economic total	of which tourism	Economic total	of which tourism
	Mill. Euro									
I Output	5 574 794	251 233	5 744 492	256 206	6 015 126	266 224	6 227 861	274 255	6 304 843	279 476
II Total intermediate consumption	2 852 775	140 767	2 922 049	143 426	3 078 423	149 158	3 203 439	153 760	3 198 686	155 670
I–II Gross value added	2 722 019	110 466	2 822 443	112 779	2 936 703	117 065	3 024 422	120 495	3 106 157	123 805
	%									
Share of tourism of GVA	–	4,06	–	4,00	–	3,99	–	3,98	–	3,99

There may be deviations in the totals due to rounding in the subtotals.

## 2.7 TSA 7 – Employed Persons connected to Tourism Consumption

An important part of tourism as an economic factor are the jobs that are dependent on tourism consumption. Table 2.7-1 contains the persons in employment in Germany for the year 2019. The persons in employment associated with tourism consumption are shown in more detail. In the columns the 12 tourism-relevant economic sectors are shown individually, the non-tourism-related industries are summarized in the column “other economic sectors”. In addition, the employees are broken down in the rows according to the tourism-relevant product groups as well as the remaining goods and services.

Overall, those in employment associated with tourism consumption accounted for 2.8 million in 2019, which corresponds to 6 % of the total number of persons in employment in Germany. In touristic industries, this share was 27 % (2.2 million) and in others it was 1.6 % (0.6 million). This means that the shares of those in employment with a tourism-related background were higher than the corresponding shares of tourism GVA. This difference was particularly noticeable in touristic economic sectors, where, according to TSA 6, only 12 % of GVA but 27 % of employment was related to tourism. This difference arose, for example, from the fact that real estate activities are included in the table as a touristic economic sector. In real estate activities, EUR 327 billion GVA was generated, of which only 1.3 % was touristic. Without this industry, the share of tourism GVA in the tourism economic sectors is 21 % and the share of those employed through tourism was 29 %. Table 2.7-2 shows the GVA per employee for tourist and non-tourist activities and employees. One can see that there were big differences between the tourist economic sectors. The GVA per employee ranged from EUR 24,000 in the food and beverage service industry to EUR 681,000 in real estate activities. However, the rates between tourist and non-tourist activities hardly differ.

The results of TSA table 7 and TSA table 6 indicate that tourism contributed to the GVA (4 %), but that its relevance to the labor market was greater (6 %), due to the high number of people employed in the industries of accommodation and food and beverage serving services.

The share of those in employment with a tourism connection in the economic sector water transport was particularly low (9 %), since this industry is dominated by goods transportation. In addition, the car rental industry (4 %), the provision of other economic services (2 %) and human health activities (4 %) had low tourist employment shares.

Table 2.7-3 shows the time series of persons in employment who are employed in a tourism-related manner over the period 2015-2019. Most of the people (around 1 million) provided food and beverage serving services and almost 500,000 accommodation services. Overall, the jobs related to tourism consumption have developed slightly positively since 2015. While around 2.7 million people were employed in the tourism sector in 2015 and 2016, their number rose by 1 % to 2.8 million people in 2019. Over the time series, the largest increase in jobs, by 13,000 in absolute numbers, took place in the accommodation sector.

## Tourism and Economy: Overview of TSA-Tables

### 2.7-1 Tourism-related employment according to tourism and other economic sectors, 2019

	Tourism-related employment												Total of tourist industries	Other industries	Total persons of tourist industries	Total persons in employ- ment	Share of Tourism
	Accommo- dation	Real estate activities	Food and beverage service activities	Rail transport	Road transport	Water transport	Air transport	Renting and leasing of cars and light motor vehicles	Travel agencies and tour operator activities	Sport, recreati- onal and cultural services	Other economic services	Human health activities					
	in 1 000																
I) Internationally defined touristic products	483	4	1 019	16	150	2	44	5	100	221	0	0	2 044	52	2 097	3 178	66
1 – Accommodation services for visitors	483	4	0	0	0	0	0	0	0	0	0	0	488	3	491	809	61
a) Conventional accommodation services	483	0	0	0	0	0	0	0	0	0	0	0	483	3	486	492	99
b) Imputed accommodation services	0	4	0	0	0	0	0	0	0	0	0	0	4	0	4	316	1
2 – Food and beverage serving services	0	0	1 019	0	0	0	0	0	0	0	0	0	1 019	0	1 019	1 107	92
3 – Railway passenger services	0	0	0	16	0	0	0	0	0	0	0	0	16	0	16	20	78
4 – Road passenger transport services	0	0	0	0	150	0	0	0	0	0	0	0	150	1	151	414	36
5 – Water passenger transport services	0	0	0	0	0	2	0	0	0	0	0	0	2	0	2	4	53
6 – Air passenger transport services	0	0	0	0	0	0	44	0	0	0	0	0	44	0	44	48	90
7 – Transport equipment rental services	0	0	0	0	0	0	0	5	0	0	0	0	6	0	6	101	6
8 – Travel agencies and other reservation services	0	0	0	0	0	0	0	0	100	0	0	0	100	0	100	100	100
9 – Sport, recreational and cultural services	0	0	0	0	0	0	0	0	0	221	0	0	221	48	269	575	47
II) Other touristic products	0	0	0	0	0	0	0	0	0	0	0	106	106	85	191	3 372	6
10 – Health services	0	0	0	0	0	0	0	0	0	0	0	0	106	0	106	1 559	7
11 – Food	0	0	0	0	0	0	0	0	0	0	0	0	0	47	47	1 589	3
12 – Fuel	0	0	0	0	0	0	0	0	0	0	0	0	0	37	37	224	17
III) All remaining goods and services	0	2	3	0	5	0	0	1	0	2	14	19	46	445	491	38 719	1
13 – Remaining goods	0	0	0	0	0	0	0	0	0	0	0	0	0	233	233	15 752	1
14 – Remaining services	0	2	3	0	5	0	0	1	0	1	14	19	46	212	258	22 967	1
Tourisms-related employees	483	6	1 022	16	155	2	44	6	100	222	14	125	2 197	582	2 779	–	–
Total employees	508	481	1 386	58	898	25	67	149	110	614	554	3 294	8 145	37 124	45 269	–	–
	%																
Tourism share in %	95,21	1,30	73,74	27,66	17,29	8,71	65,54	3,99	91,36	36,16	2,49	3,80	26,97	1,57	6,14	–	–

There may be deviations in the totals due to rounding in the subtotals.

2.7-2 Gross value added per employed person for selected economic sectors

	Gross value added per employed person												Total of tourist industries	Other industries	Total persons in employment
	Accommodation	Real estate activities	Food and beverage service activities	Rail transport	Road transport	Water transport	Air transport	Renting and leasing of cars and light motor vehicles	Travel agencies and tour operator activities	Sport, recreational and cultural services	Other economic services	Human health activities			
	in 1 000														
	2015														
total	32	640	20	58	53	238	129	316	69	52	44	47	85	58	63
Value for tourism	31	610	20	57	54	233	126	316	71	52	44	47	37	54	40
	2016														
total	33	655	21	48	53	163	126	335	61	53	45	48	86	60	65
Value for tourism	32	628	21	47	54	143	121	335	62	53	45	48	37	55	41
	2017														
total	34	658	22	51	53	249	119	332	64	55	46	49	87	62	66
Value for tourism	33	633	21	50	54	229	115	334	66	55	46	49	38	58	42
	2018														
total	35	666	23	52	54	236	107	329	71	57	54	50	89	63	67
Value for tourism	34	653	24	51	50	228	103	351	72	59	54	54	39	58	43
	2019														
total	36	681	24	54	55	250	113	329	70	58	55	52	91	64	69
Value for tourism	36	664	24	53	56	232	109	329	72	58	55	52	41	58	45

There may be deviations in the totals due to rounding in the subtotals.



## 2.7-3 Employees relevant to tourism

	2015	2016	2017	2018	2019
	in 1 000				
<b>I) Internationally defined touristic products</b>	<b>2 076</b>	<b>2 064</b>	<b>2 095</b>	<b>2 100</b>	<b>2 097</b>
1 – Accommodation services for visitors	477	481	485	489	491
a) Conventional accommodation services	473	477	481	485	486
b) Imputed accommodation services	4	4	4	4	4
2 – Food and beverage serving services	1 015	1 008	1 037	1 040	1 019
3 – Railway passenger services	15	15	15	15	16
4 – Road passenger transport services	147	139	136	128	151
5 – Water passenger transport services	1	2	2	2	2
6 – Air passenger transport services	45	45	45	44	44
7 – Transport equipment rental services	4	4	5	6	6
8 – Travel agencies and other reservation services	96	94	97	100	100
9 – Sport, recreational and cultural services	277	274	273	276	269
<b>II) Other touristic products</b>	<b>187</b>	<b>186</b>	<b>188</b>	<b>185</b>	<b>191</b>
10 – Health services	96	101	105	104	106
11 – Food	47	47	47	47	47
12 – Fuel	44	38	35	34	37
<b>III) All remaining goods and services</b>	<b>485</b>	<b>497</b>	<b>495</b>	<b>502</b>	<b>491</b>
13 – Remaining goods	233	240	235	241	233
14 – Remaining services	252	258	261	261	258
<b>Total</b>	<b>2 748</b>	<b>2 748</b>	<b>2 778</b>	<b>2 786</b>	<b>2 779</b>

There may be deviations in the totals due to rounding in the subtotals.

## 2.8 TSA 8 – Gross fixed Capital Formation in the tourist Industries

This section describes the gross fixed capital formation due to tourism. This includes, for example, new beds for a hotel or a tour operator's investment in new computers. The TSA table 8 of the gross fixed capital formation of the tourism industries contains in the columns the sum of the tourism-relevant as well as the other economic sectors, and in the rows based on the economically most important goods groups for the gross capital investments the tourism-relevant goods groups, separated for gross fixed capital formation in construction, machinery and equipment and other fixed assets.

In total, tourism investments in 2019 amounted to EUR 17.3 billion, which corresponds to 2 % of total German gross fixed capital formation. Within the tourist economic sectors, 3 % i.e. EUR 11.4 billion of the EUR 333.6 billion in investments were used for tourist consumption. Construction accounted for the largest positions in tourism investments with EUR 8.8 billion (51 %), followed by other assets with EUR 2.1 billion (12 %) and machinery with EUR 1.9 billion (11 %). The most tourist investments were made in these products in the other economic sectors as well. Around two thirds of the investments for tourism purposes were made in the tourism economic sectors.

From 2015 to 2019, tourism-related gross fixed capital formation developed largely positively, as shown in Table 2.8-2. They rose by 9 % from EUR 15.8 billion in 2015 to EUR 17.3 billion in 2019, after a high of EUR 17.5 billion in 2018. With an increase of 16 % in the observed period, the tourist gross fixed capital formation in construction grew especially much. The development of investments in machinery and equipment was similar rose from 2015 to 2018 by 10 % from 6.4 billion EUR to 7.1 billion EUR, in 2019 it fell again to the level of 2015.

### 2.8-1 Gross fixed capital formation in tourism and other economic sectors, 2019

	Total of tourist industries		Other industries		Capital formation Total	
	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism
	Mill. Euro					
<b>I) Construction</b>	<b>259 530</b>	<b>7 042</b>	<b>114 165</b>	<b>1 789</b>	<b>373 695</b>	<b>8 831</b>
other goods	212 197	5 757	93 344	1 462	305 541	7 220
other services	47 333	1 285	20 821	326	68 154	1 611
<b>II) Machinery and equipment</b>	<b>74 042</b>	<b>4 347</b>	<b>166 097</b>	<b>2 037</b>	<b>240 139</b>	<b>6 384</b>
1 – Machinery	8 092	1 020	57 856	906	65 948	1 926
2 – Computer and office equipment	3 390	341	9 601	151	12 991	492
3 – Communication equipment	1 970	213	5 575	88	7 545	301
4 – Furniture, music and sports equipment	3 270	656	7 334	115	10 604	771
5 – Motor vehicles and motor vehicle parts	31 108	705	28 855	0	59 963	705
6 – Other vehicles	11 212	0	7 824	8	19 036	8
7 – Other machinery and devices	7 994	601	16 575	260	24 569	861
8 – Other equipment	7 006	811	32 477	509	39 483	1 320
<b>III) Other assets</b>	<b>0</b>	<b>0</b>	<b>134 152</b>	<b>2 102</b>	<b>134 152</b>	<b>2 102</b>
<b>Total</b>	<b>333 572</b>	<b>11 390</b>	<b>414 414</b>	<b>5 928</b>	<b>747 986</b>	<b>17 317</b>

There may be deviations in the totals due to rounding in the subtotals.

### 2.8-2 Gross fixed capital formation

	2015		2016		2017		2018		2019	
	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism	Total	Value for tourism
	Mill. Euro									
<b>I) Construction</b>	<b>291 243</b>	<b>7 631</b>	<b>307 923</b>	<b>7 898</b>	<b>321 016</b>	<b>8 158</b>	<b>344 866</b>	<b>8 403</b>	<b>373 695</b>	<b>8 831</b>
other goods	235 660	6 175	247 812	6 357	257 957	6 555	280 991	6 847	305 541	7 220
other services	55 583	1 456	60 111	1 541	63 059	1 603	63 875	1 556	68 154	1 611
<b>II) Machinery and equipment</b>	<b>206 943</b>	<b>6 416</b>	<b>214 122</b>	<b>6 707</b>	<b>224 492</b>	<b>6 694</b>	<b>235 619</b>	<b>7 079</b>	<b>240 139</b>	<b>6 384</b>
1 – Machinery	58 979	1 848	62 152	2 000	63 749	2 006	66 966	2 037	65 948	1 926
2 – Computer and office equipment	12 391	502	12 215	509	12 359	498	13 244	523	12 991	492
3 – Communication equipment	6 358	272	7 225	307	8 300	340	8 201	343	7 545	301
4 – Furniture, music and sports equipment	9 484	767	9 792	797	9 924	758	10 208	751	10 604	771
5 – Motor vehicles and motor vehicle parts	43 443	805	47 340	836	52 053	854	53 619	948	59 963	705
6 – Other vehicles	15 851	3	14 616	5	15 167	5	16 299	7	19 036	8
7 – Other machinery and devices	24 716	949	24 886	975	24 514	931	25 717	1 065	24 569	861
8 – Other equipment	35 721	1 269	35 895	1 279	38 424	1 302	41 365	1 405	39 483	1 320
<b>III) Other assets</b>	<b>107 650</b>	<b>1 794</b>	<b>114 254</b>	<b>1 893</b>	<b>120 457</b>	<b>1 940</b>	<b>128 768</b>	<b>2 023</b>	<b>134 152</b>	<b>2 102</b>
<b>Total</b>	<b>605 836</b>	<b>15 841</b>	<b>636 299</b>	<b>16 498</b>	<b>665 965</b>	<b>16 792</b>	<b>709 253</b>	<b>17 506</b>	<b>747 986</b>	<b>17 317</b>

There may be deviations in the totals due to rounding in the subtotals.

## 2.9 TSA 9 – Tourism-related Tax Revenues and Government Expenditures

The government budget is also affected by tourism. On the one hand, part of its income is generated through tourism. On the other hand, the state has tourism-related expenditures, for example in the form of subsidies or salaries. Table 2.9-1 shows the tax revenues and government expenditures related to tourism for the year 2019 calculated within the framework of the project. The tax revenues and government expenditures not related to tourism are summarized in each case, those related to tourism are broken down in more detail.

According to the calculation, the state receives income with possible tourism relation via current taxes in the amount of EUR 49.5 billion, which corresponds to 3 % of the total income and 6 % of current tax income. Of this, EUR 36.7 billion was generated through production and import taxes, namely taxes on goods and value added tax, and EUR 11.9 billion through income tax (wage tax, corporation tax and assessed income tax). In the income category production and import taxes, tourism-related income is particularly important with a share of 11 % of total income, while income tax only has a 3 % tourism share. In 2019 tourist-related Government spending amounted to EUR 15.9 billion. The largest expenditure items were employee compensations (EUR 6.9 billion) and intermediate consumption (EUR 5.5 billion).

In the period from 2015 to 2019, the state's income with a possible tourism connection rose from EUR 48.9 billion to EUR 49.5 billion, which corresponds to an increase of 1.3 %. The increase in revenues in the areas of VAT (by EUR 0.7 billion), wage tax (by EUR 1.6 billion) and corporation tax (by EUR 0.4 billion) could offset to the decrease in taxes on products (excluding VAT) by EUR 2.0 billion. The state's expenditures with a possible tourism connection rose in the same period by 11 % to EUR 15.9 billion in 2019. The state increased its expenditures for intermediate consumption, employee compensation, other subsidies and gross fixed capital formation, all other areas remained unfunded.

**2.9-1 Tourism-related government income and expenditures**

	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
	Mill. Euro					Share of government income and expenditure, respectively in %				
<b>Government income</b>	<b>1 364,9</b>	<b>1 426,7</b>	<b>1 485,2</b>	<b>1 553,8</b>	<b>1 610,6</b>	–	–	–	–	–
of which										
Tourism-related government income	48,9	47,5	48,0	49,6	49,5	3,6	3,3	3,2	3,2	3,1
of which										
Taxes on products (without value added tax)	13,0	12,0	11,0	11,0	11,0	–	–	–	–	–
Value added tax	25,0	24,0	25,0	26,0	25,7	–	–	–	–	–
Other taxes on products (government)	1,0	1,0	1,0	1,0	0,9	–	–	–	–	–
Assessed income tax (including solidarity surcharge)	0,0	0,0	0,0	0,0	0,0	–	–	–	–	–
Wage tax (including solidarity surcharge)	9,3	9,6	10,0	10,5	10,9	–	–	–	–	–
Corporation tax	0,6	0,9	0,9	1,1	1,0	–	–	–	–	–
Trade tax	0,0	0,0	0,0	0,0	0,0	–	–	–	–	–
<b>Government expenditure</b>	<b>1 335,8</b>	<b>1 390,4</b>	<b>1 440,8</b>	<b>1 492,2</b>	<b>1 558,1</b>	–	–	–	–	–
of which										
Tourism-related government expenditure	14,2	14,6	14,8	15,5	15,9	1,1	1,0	1,0	1,0	1,0
of which										
Intermediate consumption	5,0	5,2	5,3	5,4	5,5	–	–	–	–	–
Employee compensation	6,3	6,4	6,5	6,8	6,9	–	–	–	–	–
Other spending on production	0,0	0,0	0,0	0,0	0,0	–	–	–	–	–
Subsidies on products (of the government)	0,0	0,0	0,0	0,0	0,0	–	–	–	–	–
Other subsidies	1,3	1,3	1,3	1,4	1,5	–	–	–	–	–
Investment grants	0,0	0,0	0,0	0,0	0,0	–	–	–	–	–
Gross fixed capital formation	1,6	1,6	1,7	1,9	1,9	–	–	–	–	–

There may be deviations in the totals due to rounding in the subtotals.

## 2.10 TSA 10 – Indirect Effects

The full economic analysis of domestic tourism must consider both direct and indirect effects. A change in the demand for tourist goods also influences the demand for their intermediate consumption. The provision of food and beverage serving services, for example, requires food. Hence, the direct demand for food and beverage serving services indirectly affects food production. The jobs of the supplying industries also depend indirectly on the demand for tourist goods. The total number of employees related to tourism is thus composed of people employed in the production of tourism goods directly, and people employed in the production of intermediary goods necessary for the production of tourism goods indirectly. The same applies to the GVA along the value-added chain.

The TSA- tables show three indirect effects:

- Indirect domestic production – the domestically manufactured products that are inputs for tourist goods and services;
- Cumulative gross value added – the GVA that arises along the value chain due to tourism;
- The indirect and cumulative number of persons in employment – the comprehensive impact of tourism on the labor market.

### 2.10.1 – Indirect Production

The direct production of the tourist products in demand amounting to EUR 279.5 billion in 2019 were linked to EUR 199.9 billion from products indirectly produced domestically. Thus, a total of EUR 479.4 billion of products were related to the tourism industry. In terms of production as a whole, direct and indirect tourism-related production accounted for 7.6 %.

In 2019, the transport sector played the most important economic role as a „supplier“ for tourism. From the total of EUR 199.9 billion of indirect production, the traffic-relevant areas produced 19 % (land traffic and transport services in pipelines; air passenger transport services; warehouse services, other transport services; rental services for movable property). Also important for tourism were real estate and housing services with EUR 13.6 billion and the food and feed, beverages and tobacco products industries with EUR 11.1 billion.

Over the period 2015-2019, indirect production increased by a total of 12 %. The areas of air passenger transport, financial services and sale of food, animal feeds, beverages and tobacco fell by 34 %, 5 % and 2 % respectively, as indirect intermediate consumption for tourism. The structure of indirect production, however, did not change significantly, since the economic production structure mostly remained constant during this period.

#### 2.10-1 Direct and indirect output for tourism purposes

	2015	2016	2017	2018	2019
	Mill. Euro				
<b>Output total</b>	<b>5 574 794</b>	<b>5 744 492</b>	<b>6 015 126</b>	<b>6 227 861</b>	<b>6 304 843</b>
of which					
<b>Tourism-relevant output</b>	<b>428 930</b>	<b>437 215</b>	<b>454 409</b>	<b>470 521</b>	<b>479 378</b>
of which					
Indirect output	177 697	181 010	188 186	196 266	199 903
Warehousing and support activities for transportation	13 711	14 138	14 665	15 005	15 779
Real estate activities	12 223	12 597	12 829	13 313	13 573
Sale of food, animal feeds, beverages and tobacco	11 309	10 656	11 527	10 886	11 110
Land transport and transport via pipelines	9 301	9 858	10 726	10 886	11 181
Wholesale trade, except of motor vehicles and motorcycles	8 101	8 926	9 098	9 845	10 003
Legal, accounting and consulting activities	7 957	8 457	8 757	8 666	8 778
Air transport services	6 498	5 777	4 991	4 282	4 311
Specialised construction activities	6 133	6 396	6 757	6 818	6 969
Financial service activities	5 991	5 806	5 627	5 594	5 701
Rental and leasing activities	5 999	6 172	5 772	6 001	6 161
Other output	90 473	92 228	97 437	104 969	106 338
Direct output	251 233	256 206	266 224	274 255	279 476
	<b>Share of total output %</b>				
<b>Tourism-relevant output</b>	<b>7,7</b>	<b>7,6</b>	<b>7,6</b>	<b>7,6</b>	<b>7,6</b>
of which					
Indirect output	3,2	3,2	3,1	3,2	3,2
Direct output	4,5	4,5	4,4	4,4	4,4

There may be deviations in the totals due to rounding in the subtotals.

### 2.10.2 – Indirect Gross Value Added

The economic importance of tourism in 2019, measured directly, was 3.99%. This number increases to a total of 6.96% when the domestic intermediate supply is included. The total gross value added in Germany was EUR 3,106.2 billion, of which EUR 123.8 billion was directly related to tourism demand and EUR 92.4 billion indirectly.

Over the course of time between 2015 and 2019, the development of the cumulative gross value added from tourism was the same as the development of the direct gross value added from tourism, namely, it rose at a relatively constant rate.

#### 2.10-2 Direct and indirect gross value added for tourism purposes

	2015	2016	2017	2018	2019
	Mill. Euro				
<b>Total gross value added</b>	<b>2 722 019</b>	<b>2 822 443</b>	<b>2 936 703</b>	<b>3 024 422</b>	<b>3 106 157</b>
of which					
<b>Tourism-relevant gross value added</b>	<b>191 918</b>	<b>196 205</b>	<b>203 818</b>	<b>210 526</b>	<b>216 186</b>
of which					
Direct gross value added	110 466	112 779	117 065	120 495	123 805
Indirect gross value added	81 452	83 426	86 753	90 031	92 381
	<b>Share of total gross value added %</b>				
<b>Tourism-relevant gross value added</b>	<b>7,05</b>	<b>6,95</b>	<b>6,94</b>	<b>6,96</b>	<b>6,96</b>
of which					
Direct gross value added	4,06	4,00	3,99	3,98	3,99
Indirect gross value added	2,99	2,96	2,95	2,98	2,97

There may be deviations in the totals due to rounding in the subtotals.

### 2.10.3 – Indirect Persons in Employment

Tourism supply chains also have an impact on employment. Viewed directly, 2.8 million people were employed in tourism in 2019. A further 1.3 million people were indirectly employed. This means that more than 4 million people in employment were directly and indirectly dependent on tourism in Germany, which makes up 9 % of the total number employees.

In principle, the distribution of indirect employees follows the distribution of indirect production; Transport and trade services play the largest role in this. Together, these two areas employed over 23 % of the indirect workforce. Overall, compared to 2015 there were 3 % more persons indirectly employed through tourism in 2019, while their number in sale of food, animal feed, beverages and tobacco fell by 6 000, in air transport services by 4 000, in financial service activities by 3 000 and by 2 000 in the area of specialised construction activities.

#### 2.10-3 Direct and indirect persons in employment in tourism

	2015	2016	2017	2018	2019
	1 000				
<b>Total persons in employment</b>	<b>43 122</b>	<b>43 661</b>	<b>44 262</b>	<b>44 868</b>	<b>45 269</b>
of which					
<b>Tourism-relevant persons in employment <sup>1</sup></b>	<b>4 011</b>	<b>4 009</b>	<b>4 060</b>	<b>4 102</b>	<b>4 086</b>
of which					
Indirect output <sup>1</sup>	1 264	1 261	1 282	1 316	1 307
Warehousing and support activities for transportation	73	76	75	76	78
Real estate activities	15	15	15	15	15
Sale of food, animal feeds, beverages and tobacco	56	52	53	51	50
Land transport and transport via pipelines	88	92	99	96	97
Wholesale trade, except of motor vehicles and motorcycles	64	68	65	66	66
Legal, accounting and consulting activities	67	68	68	71	70
Air transport services	15	14	12	11	11
Specialised construction activities	58	58	59	56	56
Financial service activities	26	26	24	24	23
Rental and leasing activities	12	12	12	12	12
Other output	790	781	801	838	830
<b>Direct output</b>	<b>2 748</b>	<b>2 748</b>	<b>2 778</b>	<b>2 786</b>	<b>2 779</b>
	<b>Share of total persons in employment %</b>				
<b>Tourism-relevant persons in employment</b>	<b>9,3</b>	<b>9,2</b>	<b>9,2</b>	<b>9,1</b>	<b>9,0</b>
of which					
Indirect persons in employment	2,9	2,9	2,9	2,9	2,9
Direct persons in employment	6,4	6,3	6,3	6,2	6,1

There may be deviations in the totals due to rounding in the subtotals.

### 3 Sustainability and Tourism

The tables in the chapter on „Sustainability and Tourism“ aim to show the most essential environmental issues associated with tourism. They are presented within the overall system of Environmental-Economic Accounts in order to put them in perspective to the economy as a whole.

Chapter 3.1 deals with domestic energy consumption for the production of products that satisfy touristic demand. Subsequently, chapter 3.2 deals with greenhouse gas emissions that are associated with the consumption of energy carriers. Both the calculations of energy consumption and greenhouse gas emissions are solely based on the production within the value-added process. Thus, the calculations do explicitly not include consumption or emissions from the production of intermediate products.

Chapter 3.3 provides an overview of the raw materials used for the production of products that satisfy touristic demand in Germany, measured in raw material equivalents. The calculation of raw material equivalents allows for a consideration of all raw materials that were required worldwide throughout the entire value chain (i.e. in the context of value added as well as for the production of intermediate products) for the provision of touristic products.

Finally, chapter 3.4 deals with the use of market-based environmental protection services by companies in the tourism sector in Germany.

#### 3.1 Energy consumption

The provision of touristic goods and services requires a significant input of energy. Tables 3.1-1 and 3.1-2 show the domestic energy consumption for the production of products that satisfy touristic demand. It is important to note that the columns' totals contain the final energy consumption and thus make it possible to put the energy consumption of tourism in perspective to the economy as a whole. In addition, the product breakdown known from the TSA tables in chapter 2 was applied. The product groups which are relevant to tourism are listed individually in the product breakdown, and supplemented by the remaining goods and services in rows 13 and 14. The energy consumption for the production of non-tourism-related products subsumes the energy consumption from the production of all other products that are not related to tourism.

In table 3.1-1, the energy consumption of all energy carriers and economic sectors is shown in aggregated form and presented as a time series for the reporting years 2015 to 2019.

Following the Energy Accounts provided by the Environmental-Economic Accounts, Germany's final energy consumption in the reporting year 2019 amounted to 8.97 million terajoules (TJ)<sup>1</sup>. Table 3.1-1 shows for the reporting year 2019, that tourism-related goods and services in Germany were produced using 298,824 TJ. In terms of the benchmark figure of the final energy consumption from the Energy Accounts, this means that around 3.3 % of Germany's energy consumption was spent on the production of tourism-related products.

Furthermore, table 3.1-1 indicates that around 80 % of the touristic energy consumption, i.e. 240,319 TJ, was used for the production of products internationally defined as touristic. Among these, about 35 % of energy consumption was used for the provision of air passenger transport services, 14 % for food and beverage serving services, 11 % for road passenger transport services, and 9 % for accommodation services for visitors. A further 2 % was used for the production of other touristic products and 17 % for the production of all remaining goods and services, which are also related to tourism, albeit to a lesser extent.

Table 3.1-2 shows the energy consumption for the reporting year 2019 and distinguishes between seven different types of energy carriers. One sees that mineral oils accounted for around 58 % of the touristic energy consumption in 2019. Usage of electricity accounted for another 24 % and the use of gases for 12 %. However, coal, renewable energies, and district heating, accounted for each only about 2 % of the touristic energy consumption, while other energy carriers hardly played a role at 0.4 %.

Table 3.1-2 also shows that food and beverage serving services (23,113 TJ), accommodation services for visitors (15,363 TJ), railway passenger services (6,337 TJ) as well as sport, recreational and cultural services (6,126 TJ) mainly used electricity, whereas air passenger transport services (105,744 TJ), road passenger transport services (27,899 TJ), and water passenger transport services (4,701 TJ) essentially used mineral oils.

<sup>1</sup> Federal Statistical Office of Germany (Destatis), 2021d.

## 3.1-1 Tourism-related energy consumption by product group

	2015	2016	2017	2018	2019
	Terajoule				
	<b>I) Internationally defined touristic products</b>				
1 – Accommodation services for visitors	25 428	27 893	30 136	28 238	28 012
a) Conventional accommodation services	25 071	27 532	29 773	27 875	27 671
b) Imputed accommodation services	357	361	363	363	341
2 – Food and beverage serving services	48 922	51 132	49 725	45 405	42 310
3 – Railway passenger services	6 895	7 821	8 309	8 145	8 029
4 – Road passenger transport services	45 655	41 661	38 476	34 373	32 474
5 – Water passenger transport services	5 344	9 058	7 199	5 381	4 704
6 – Air passenger transport services	96 630	100 834	109 213	110 594	105 832
7 – Transport equipment rental services	179	189	207	206	210
8 – Travel agencies and other reservation services	2 155	2 012	2 131	2 049	2 056
9 – Sport, recreational and cultural services	19 490	18 940	18 949	17 535	16 692
	<b>II) Other touristic products</b>				
10 – Health services	3 294	3 234	3 353	3 014	3 155
11 – Food	2 927	3 065	3 205	2 942	2 898
12 – Fuel	530	538	414	235	336
	<b>III) All remaining goods and services</b>				
13 – Remaining goods	19 790	20 706	20 449	20 019	18 911
14 – Remaining services	34 841	34 786	35 805	34 558	33 206
<b>Total tourism-related energy consumption</b>	<b>312 078</b>	<b>321 870</b>	<b>327 571</b>	<b>312 697</b>	<b>298 824</b>
<b>Non-tourism-related energy consumption</b>	<b>4 584 593</b>	<b>4 625 280</b>	<b>4 744 513</b>	<b>4 618 415</b>	<b>4 577 585</b>
<b>Energy consumption of private households</b>	<b>4 057 766</b>	<b>4 146 833</b>	<b>4 110 209</b>	<b>4 037 215</b>	<b>4 140 329</b>
<b>Final energy consumption (final consumption concept)</b>	<b>8 954 437</b>	<b>9 093 983</b>	<b>9 182 293</b>	<b>8 968 327</b>	<b>9 016 739</b>
<b>Statistical difference <sup>1</sup></b>	<b>– 56 344</b>	<b>– 22 792</b>	<b>25 507</b>	<b>– 5 310</b>	<b>– 43 386</b>
<b>Final energy consumption (sales concept)</b>	<b>8 898 093</b>	<b>9 071 191</b>	<b>9 207 800</b>	<b>8 963 017</b>	<b>8 973 353</b>

There may be deviations in the totals due to rounding in the subtotals.

<sup>1</sup> The difference includes the disparity between actual domestic fuel consumption and domestic fuel sales.



## 3.1-2 Tourism-related energy consumption by product group and energy carriers, 2019

	Total energy carriers	of which						
		Coal	Electricity	Mineral oils	Gases	Renewable energies	District heating	Other energy carriers
	Terajoule							
	<b>I) Internationally defined touristic products</b>							
1 – Accommodation services for visitors	28 012	38	15 363	6 753	5 266	27	558	7
a) Conventional accommodation services	27 671	38	15 101	6 706	5 238	25	556	7
b) Imputed accommodation services	341	–	262	46	28	2	3	–
2 – Food and beverage serving services	42 310	2	23 113	10 236	8 111	–	849	–
3 – Railway passenger services	8 029	–	6 337	1 425	67	172	29	–
4 – Road passenger transport services	32 474	12	2 842	27 899	179	1 528	12	2
5 – Water passenger transport services	4 704	–	0	4 701	0	2	0	–
6 – Air passenger transport services	105 832	–	0	105 744	63	20	4	–
7 – Transport equipment rental services	210	4	27	146	23	7	4	1
8 – Travel agencies and other reservation services	2 056	–	417	902	648	–	89	–
9 – Sport, recreational and cultural services	16 692	670	6 126	3 009	4 489	1 683	588	126
	<b>II) Other touristic products</b>							
10 – Health services	3 155	–	1 244	451	1 305	24	131	–
11 – Food	2 898	284	831	555	834	195	145	54
12 – Fuel	336	33	96	64	97	23	17	6
	<b>III) All remaining goods and services</b>							
13 – Remaining goods	18 911	1 848	5 413	3 649	5 432	1 274	945	350
14 – Remaining services	33 206	2 889	9 133	8 232	8 824	2 069	1 513	547
<b>Total tourism-related energy consumption</b>	<b>298 824</b>	<b>5 780</b>	<b>70 943</b>	<b>173 765</b>	<b>35 336</b>	<b>7 023</b>	<b>4 885</b>	<b>1 094</b>
<b>Non-tourism-related energy consumption</b>	<b>4 577 585</b>	<b>397 484</b>	<b>1 276 014</b>	<b>1 113 201</b>	<b>1 220 504</b>	<b>286 471</b>	<b>208 592</b>	<b>75 319</b>
<b>Energy consumption of private households</b>	<b>4 140 329</b>	<b>14 482</b>	<b>453 351</b>	<b>2 139 823</b>	<b>927 057</b>	<b>415 855</b>	<b>189 760</b>	<b>–</b>
<b>Final energy consumption (final consumption concept)</b>	<b>9 016 739</b>	<b>417 746</b>	<b>1 800 308</b>	<b>3 426 788</b>	<b>2 182 897</b>	<b>709 349</b>	<b>403 237</b>	<b>76 413</b>
<b>Statistical difference <sup>1</sup></b>	<b>– 43 386</b>	<b>–</b>	<b>– 559</b>	<b>– 31 265</b>	<b>2 109</b>	<b>– 13 670</b>	<b>–</b>	<b>–</b>
<b>Final energy consumption (sales concept)</b>	<b>8 973 353</b>	<b>417 746</b>	<b>1 799 749</b>	<b>3 395 523</b>	<b>2 185 006</b>	<b>695 679</b>	<b>403 237</b>	<b>76 413</b>

There may be deviations in the totals due to rounding in the subtotals.

<sup>1</sup> The difference includes the disparity between actual domestic fuel consumption and domestic fuel sales.

### 3.2 Air emissions

The consumption of energy for the provision of touristic goods and services is conjoined with the emission of greenhouse gases and air pollutants. Table 3.2-1 shows the domestic greenhouse gas emissions caused by the production of products that satisfy touristic demand. The emissions of the various greenhouse gases ( $\text{CO}_2$ ,  $\text{CH}_4$ ,  $\text{N}_2\text{O}$ , HFC, PFC,  $\text{SF}_6$  und  $\text{NF}_3$ ) are for this purpose shown on an aggregated level and presented as a time series for the reporting years 2015 to 2019. In addition, the product breakdown known from the TSA tables was applied. The product groups which are relevant to tourism are listed individually in the product breakdown, and supplemented by the remaining goods and services in rows 13 and 14. The greenhouse gas emissions due to the production of non-tourism-related products subsume the greenhouse gas emissions from the production of all other products that are not related to tourism.

According to Air Emission Accounts provided by the Environmental-Economic Accounts, Germany's greenhouse gas emissions in the reporting year 2019 amounted to around 949 million tons (t), measured in  $\text{CO}_2$  equivalents.<sup>2</sup> Table 3.2-1 shows the results of the calculation of Germany's tourism-related greenhouse gas emissions, regardless of the economic sectors in which they were emitted, and for the reporting years 2015 to 2019. Overall, the greenhouse gas emissions for the production of tourism-related goods and services fell from 27.3 million tons of  $\text{CO}_2$  equivalents in the reporting year 2015, to 24.6 million tons of  $\text{CO}_2$  equivalents in 2019. This corresponds to approximately 2.6 % of the domestic greenhouse gas emissions.

Roughly 64 % of touristic greenhouse gas emissions were caused in the production of such products, which have been internationally uniformly defined as touristic products. Among these, the provision of air passenger transport services accounted for about 32 % of the total touristic greenhouse gas emissions, and road passenger transport services accounted for 12 %. The production of other touristic products accounted for a further 3 % and the production of remaining goods and services for 33 %. The latter includes all other products that were demanded for touristic purposes in Germany but are not counted as part of the „core business“ of tourism as differentiated in the TSA.

A calculation of air pollutant emissions, which includes the air pollutants ammonia ( $\text{NH}_3$ ), sulfur dioxide ( $\text{SO}_2$ ), nitrogen oxides ( $\text{NO}_x$ ), non-methane volatile organic compound (NMVOC), carbon monoxide (CO), and particulate matter (PM 10  $\mu\text{m}$  and PM 2.5  $\mu\text{m}$ ), is part of the more comprehensive background report.<sup>3</sup>

<sup>2</sup> Federal Statistical Office of Germany (Destatis), 2021b.

<sup>3</sup> Federal Statistical Office of Germany (Destatis), 2021a.

## 3.2-1 Tourism-related greenhouse gas emissions by product group

	2015	2016	2017	2018	2019
	1,000 tons of CO <sub>2</sub> equivalents				
	<b>I) Internationally defined touristic products</b>				
1 – Accommodation services for visitors	985	1 075	1 138	1 020	1 123
a) Conventional accommodation services	977	1 067	1 130	1 012	1 116
b) Imputed accommodation services	8	8	8	8	7
2 – Food and beverage serving services	1 945	1 921	1 855	1 601	1 668
3 – Railway passenger services	291	331	296	264	265
4 – Road passenger transport services	3 906	3 540	3 343	3 027	2 849
5 – Water passenger transport services	423	725	572	424	368
6 – Air passenger transport services	7 191	7 505	8 125	8 227	7 873
7 – Transport equipment rental services	22	22	24	24	25
8 – Travel agencies and other reservation services	139	121	129	120	129
9 – Sport, recreational and cultural services	1 899	1 838	1 756	1 627	1 500
	<b>II) Other touristic products</b>				
10 – Health services	122	126	127	115	123
11 – Food	551	574	566	512	474
12 – Fuel	100	101	73	41	55
	<b>III) All remaining goods and services</b>				
13 – Remaining goods	3 724	3 868	3 610	3 482	3 088
14 – Remaining services	6 035	5 987	5 857	5 601	5 077
<b>Total tourism-related greenhouse gas emissions<sup>1</sup></b>	<b>27 334</b>	<b>27 734</b>	<b>27 473</b>	<b>26 086</b>	<b>24 616</b>
<b>Non-tourism-related greenhouse gas emissions<sup>1</sup></b>	<b>794 200</b>	<b>795 987</b>	<b>777 411</b>	<b>748 225</b>	<b>697 821</b>
<b>Greenhouse gas emissions of private households</b>	<b>224 596</b>	<b>225 177</b>	<b>224 509</b>	<b>222 111</b>	<b>226 942</b>
<b>Domestic greenhouse gas emissions (domestic concept)<sup>1</sup></b>	<b>1 046 130</b>	<b>1 048 898</b>	<b>1 029 392</b>	<b>996 421</b>	<b>949 379</b>
<b>Greenhouse gas emissions of residents abroad<sup>1</sup></b>	<b>66 092</b>	<b>60 993</b>	<b>67 101</b>	<b>71 882</b>	<b>68 213</b>
<b>Greenhouse gas emissions of non-residents on domestic territory<sup>1</sup></b>	<b>– 38 590</b>	<b>– 40 246</b>	<b>– 39 538</b>	<b>– 39 627</b>	<b>– 39 512</b>
<b>Greenhouse gas emissions of residents (national concept)<sup>1</sup></b>	<b>1 073 633</b>	<b>1 069 645</b>	<b>1 056 955</b>	<b>1 028 676</b>	<b>978 080</b>

There may be deviations in the totals due to rounding in the subtotals.

<sup>1</sup> With regards to air transport, only emissions from domestic flights are taken into account. Emissions from international flights over Germany are not included.

### 3.3 Raw material input in raw material equivalents

For the provision of touristic goods and services, the use of various raw materials is crucial. Table 3.3-1 shows the use of raw materials for the production of products that satisfy touristic demand in Germany measured in raw material equivalents. For this purpose, the raw material input is disclosed on an aggregate basis, i.e. as the sum of the various raw materials, and shown separately for the various touristic products for the reporting years 2015 to 2018.

In addition, Table 3.3-1 shows the total raw material input for the provision of products that satisfy touristic demand as well as of products not related to touristic demand. Finally, it also provides information on the total material input of the economy as a whole, which allows the touristic raw material input to be viewed in the context of the overall economic use of materials. With regard to the product classification, the breakdown known from the TSA tables was applied. Hence, the product groups which are relevant to tourism are listed individually and supplemented by the remaining goods and services in rows 13 and 14. The raw material input for the production of non-tourism-related products subsumes the use of raw materials in the production of all other products that are not related to tourism.

According to the calculations of the Environmental-Economic Accounting unit, Germany's total raw material input in the reporting year 2018 amounted to 3,014 million tons in raw material equivalents.<sup>4</sup> The raw material input (RMI) shows the quantities in raw material equivalents that were imported to Germany in the form of raw materials, semifinished and finished goods or extracted as raw materials from the domestic natural environment. At the same time, it shows the quantities of raw materials (measured in raw material equivalents) used to satisfy the consumption, investment and export demand. In the reporting year 2018, the demand for tourism-related goods and services in Germany was satisfied by the use of 100 million tons in raw material equivalents. As compared to the economy's total raw material input, this means that approximately 3.3 % of Germany's raw material input was related to tourism.

Roughly 57 % of the touristic raw material input of 100 million tons in raw material equivalents were used for the production of products internationally defined as touristic products. Among these, about 26 % of the raw material input was used for the provision of food and beverage serving services, 19 % each for accommodation services for visitors and air passenger transport services, and 18 % for travel agencies and other reservation services. A further 7 % of the touristic raw material input was used for the provision of other touristic products and 36 % for all remaining goods and services. The latter includes all other products that were demanded for touristic purposes in Germany but are not counted as part of the „core business“ of tourism as disclosed in the TSA.

<sup>4</sup> Federal Statistical Office of Germany (Destatis), 2021c. The data refer to the date of publication as of 10 September 2021.

## 3.3-1 Tourism-related raw material input by product group

	2015	2016	2017	2018
	in million tons of Raw Material Equivalents			
	<b>I) Internationally defined touristic products</b>			
1 – Accommodation services for visitors	10	10	11	11
a) Conventional accommodation services	10	10	11	11
b) Imputed accommodation services	0	0	0	0
2 – Food and beverage serving services	16	15	16	15
3 – Railway passenger services	0	0	0	0
4 – Road passenger transport services	1	1	1	1
5 – Water passenger transport services	1	2	2	2
6 – Air passenger transport services	9	10	11	11
7 – Transport equipment rental services	0	0	0	0
8 – Travel agencies and other reservation services	11	10	11	11
9 – Sport, recreational and cultural services	6	6	6	6
	<b>II) Other touristic products</b>			
10 – Health services	1	1	1	1
11 – Food	4	4	4	4
12 – Fuel	3	3	3	3
	<b>III) All remaining goods and services</b>			
13 – Remaining goods	18	19	18	19
14 – Remaining services	17	17	17	17
<b>Total tourism-related raw material input</b>	<b>96</b>	<b>99</b>	<b>100</b>	<b>100</b>
<b>Non-tourism-related raw material input</b>	<b>2 756</b>	<b>2 871</b>	<b>2 851</b>	<b>2 914</b>
<b>Total Raw Material Input (RMI)</b>	<b>2 852</b>	<b>2 970</b>	<b>2 951</b>	<b>3 014</b>

There may be deviations in the totals due to rounding in the subtotals.

### 3.4 Environmental protection expenditure

To limit negative externalities caused by tourism, expenditures to counteract them are indispensable. Tables 3.4-1 and 3.4-2 show the use of market-based environmental protection services by corporations in the tourism sector in Germany. For this purpose, the expenditures of the tourism sector are broken down by environmental domains based on the Classification of Environmental Protection Activities and Expenditures (CEPA 2000).

Table 3.4-1 presents the tourism-related use of market-based environmental protection services as a time series for the reporting years 2015 to 2018. The expenditures of all domestic economic sectors are shown on an aggregated level.

Environmental protection services in the CEPA classes 1 and 4 through 9 are exclusively purchased from government producers. Due to the absence of usable data sources for government expenditures for this project, tourism-related use of government-produced environmental protection services which are destined for the market could not be calculated. Accordingly, the corresponding table cells are shown with a period „.“ (numerical value unknown or to be kept secret).

Table 3.4-1 indicates that corporations in the tourism sector spent roughly EUR 1,926 million on market-based environmental protection services in the reporting year 2018. Of this amount, EUR 1,390 million were spent on water protection (CEPA 2), or waste water management, and another EUR 535 million on waste management (CEPA 3).

In addition, table 3.4-1 shows that the expenses by corporations in the tourism sector on environmental protection services increased by about 20 % between 2015 and 2018. Expenditures on waste collection even grew by about 36 % and expenditures on elimination of environmental pollution and other disposal increased by 44 % during this period.

Table 3.4-2 presents the tourism-related use of market-based environmental protection services in the reporting year 2018 and distinguishes between the twelve different, touristic economic sectors. The subdivision of economic sectors is congruent with the one used for the TSA tables in chapter 2.

Table 3.4-2 shows that the accommodation and food and beverage service activities industry accounted for about 63 % of the tourism-related expenditure on the use of market-based environmental protection services in the reporting year 2018. Within the tourist industry, their share is around 85 %. Accordingly, in 2018, corporations in the accommodation sector spent EUR 606 million and corporations in the food and beverage service activities industry EUR 600 million on environmental protection activities. Additionally, the other tourist industries spent around EUR 215 million and other industries around EUR 504 million on tourism-related environmental protection activities. While a large part of the environmental protection expenditures of the tourism industries accounts for waste water disposal, i.e. 88 % of the environmental protection expenditures, the expenditures of the other industries predominate in the area of waste management (73 %).

#### 3.4-1 Tourism-related use of market-based environmental protection services by environmental domains

	2015	2016	2017	2018
	in million EUR			
CEPA 1 - Protection of ambient air and climate	.	.	.	.
CEPA 2 - Waste water management	1 207	1 236	1 276	1 390
CEPA 3 - Waste management	401	440	461	535
Waste collection	190	195	228	258
Waste treatment and disposal	175	210	192	225
Elimination of environmental pollution and other disposal	36	36	40	52
CEPA 4 - Protection and remediation of soil, groundwater and surface water	.	.	.	.
CEPA 5 - Noise and vibration abatement	.	.	.	.
CEPA 6 - Protection of biodiversity and landscapes	.	.	.	.
CEPA 7 - Protection against radiation	.	.	.	.
CEPA 8 - Research and development for CEPA 1-7 and 9	.	.	.	.
CEPA 9 - Other environmental protection activities	.	.	.	.
<b>Total</b>	<b>1 607</b>	<b>1 676</b>	<b>1 737</b>	<b>1 926</b>

There may be deviations in the totals due to rounding in the subtotals.

## 3.4-2 Tourism-related use of market-based environmental protection services by environmental domains and economic sectors, 2018

	Accommodation	Real estate activities	Food and beverage service activities	Rail transport	Road transport	Water transport	Air transport	Renting and leasing of cars and light motor vehicles	Travel agencies and tour operator activities	Sport, recreational and cultural services	Other economic services	Human health activities	Total of tourist industries	Other industries	Total of market-based environmental protection expenditures
	in million EUR														
CEPA 1 - Protection of ambient air and climate	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CEPA 2 - Waste water management	561	0	541	–	7	–	1	2	1	115	2	24	1 254	137	1 390
CEPA 3 - Waste management	45	2	59	0	6	0	1	–	1	37	6	11	167	368	535
Waste collection	7	2	13	0	0	0	1	–	1	32	0	0	56	202	258
Waste treatment and disposal	26	–	29	–	4	–	–	–	–	4	6	7	74	151	225
Elimination of environmental pollution and other disposal	12	0	17	–	2	–	–	–	–	2	0	4	37	15	52
CEPA 4 - Protection and remediation of soil, ground-water and surface water	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CEPA 5 - Noise and vibration abatement	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CEPA 6 - Protection of biodiversity and landscapes	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CEPA 7 - Protection against radiation	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CEPA 8 - Research and development for CEPA 1-7 and 9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
CEPA 9 - Other environmental protection activities	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>Total</b>	<b>606</b>	<b>3</b>	<b>600</b>	<b>0</b>	<b>13</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>152</b>	<b>8</b>	<b>35</b>	<b>1 421</b>	<b>504</b>	<b>1 926</b>

There may be deviations in the totals due to rounding in the subtotals.

### Bibliography

Federal Statistical Office of Germany (Destatis). (2021a). Aktuelle Daten zur Tourismuswirtschaft: Wirtschaftliche Bedeutung und Nachhaltigkeit.

Federal Statistical Office of Germany (Destatis). (2021b). Umweltökonomische Gesamtrechnungen: Anthropogene Luftemissionen (Berichtszeitraum 2000 bis 2019). Abrufbar unter: [www.destatis.de](http://www.destatis.de)

Federal Statistical Office of Germany (Destatis). (2021c). Umweltökonomische Gesamtrechnungen: Aufkommen und Verwendung in Rohstoffäquivalenten (Berichtszeitraum 2000 bis 2018).

Federal Statistical Office of Germany (Destatis). (2021d). Umweltökonomische Gesamtrechnungen: Energiegesamtrechnung (Berichtszeitraum 2000 bis 2019).

DIW Econ (2012). Wirtschaftsfaktor Tourismus in Deutschland: Kennzahlen einer umsatzstarken Querschnittsbranche. Langfassung. Herausgeber: Bundesministerium für Wirtschaft und Technologie, 2012.