



INSTO

World Tourism Organization
International Network
of Sustainable Tourism
Observatories

Observatorio Turístico de Navarra
Nafarroako Turismoaren Behatokia



Reyno de
Navarra



Nafarroa_{ko}
Erresuma

2021 Navarre Tourism Observatory: Annual Report

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DATA FOR 2021

1. A year of restrictions and uncertainty

It is impossible to present this document without mentioning the pandemic which began in 2020, a worldwide shock on all levels, particularly affecting the tourism sector as movement and travel were restricted.

In this context, 2021 began as a period with high expectations for recovery, constantly interrupted by new waves of the pandemic, each wave with its respective restrictions on opening hours and capacity which directly affected the hospitality, catering and night-life industries and led to cancelling many events, concerts and fairs. Navarre also endured perimeter confinements until 9 May, meaning that national tourism was practically impossible until then.

Compared to 2019, a record year boasting historic figures in terms of volume of tourists and overnight stays, this year was not only a period marked by uncertainty, but also confirmed changes in tourist preferences “choosing rural destinations over cities, prioritising destinations with fewer people and types of accommodation that reduce interaction with other tourists,” as seen in 2020.

DATA

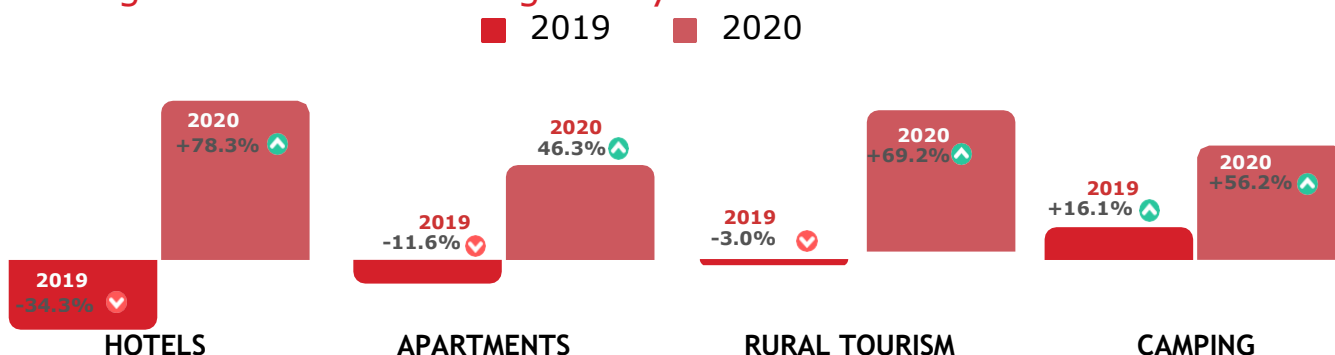
MAIN INDICATORS



| | TRAVELLERS | OVERNIGHT STAYS | AVERAGE STAY (days) |
|---------------|--|--|---|
| | 1,148,377 2019 2020 -22.4% ▼ +82.8% ▲ | 2,731,801 2019 2020 -16.6% ▼ +74.6% ▲ | 2.38 2019 2020 +7.4% ▲ -5.6% ▼ |
| NATIONAL | 918,962 2019 2020 -17.9% ▼ +73.9% ▲ | 2,298,030 2019 2020 -13.0% ▼ +69.0% ▲ | 2.5 2019 2020 +6.3 ▲ -2.8% ▼ |
| INTERNATIONAL | 222,499 2019 2020 -38.8% ▼ +188% ▲ | 433,770 2019 2020 -32,5% ▼ +172% ▲ | 1.95 2019 2020 10,3% ▲ -5.6% ▼ |

In addition to the impact on the volume of travellers and overnight stays in absolute terms that demonstrated a drop of -22.4% and -16.6% on 2019, respectively, the effect of the pandemic on the sector differed by type of accommodation. While overnight stays fell -34.3% in hotels compared to 2019, this drop was only -11.6% in apartments and -3% in rural tourism. In the case of campsites, there was even a rise in overnight stays over the same period, +16.1%.

Percentage variation in overnight stays



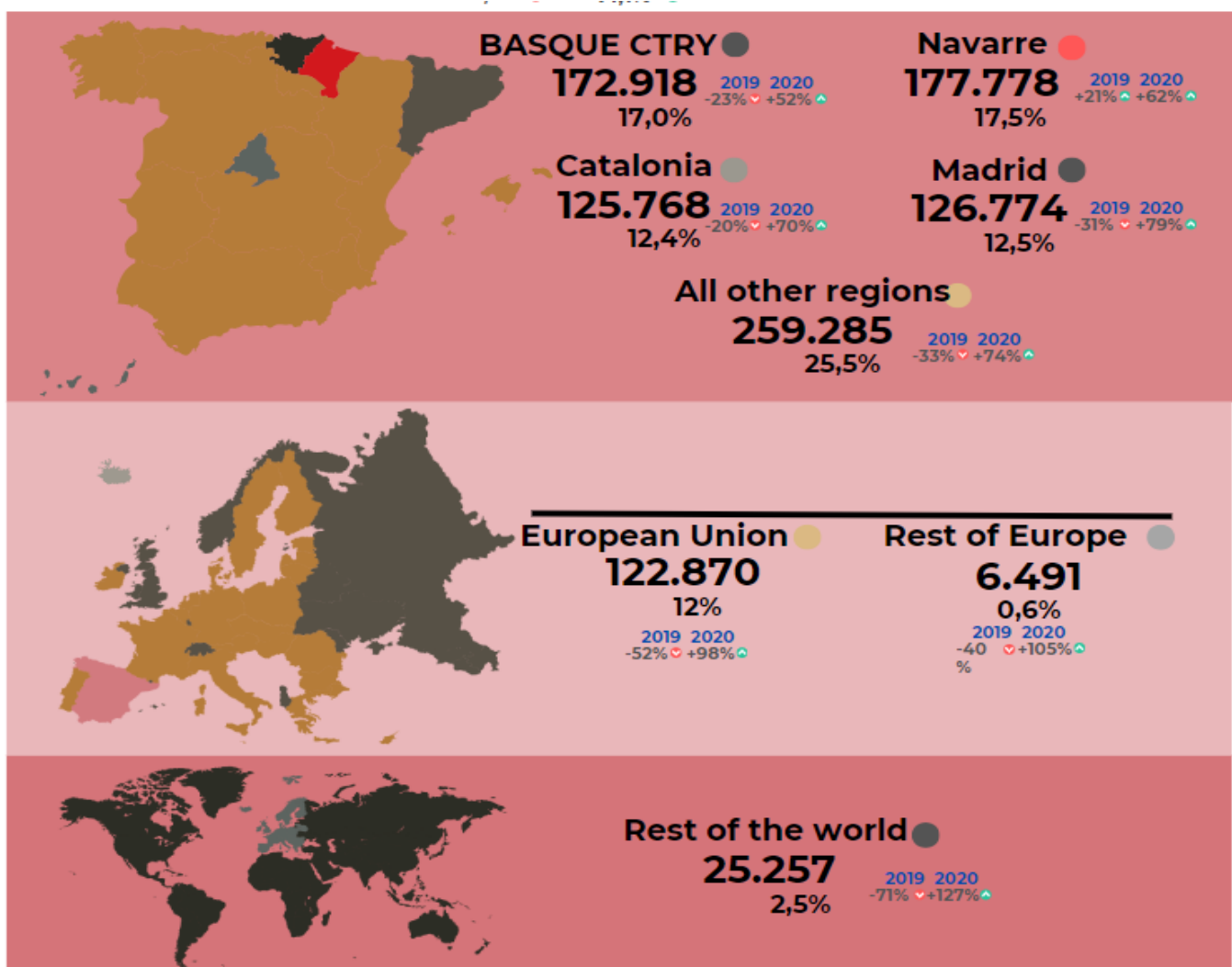
Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites and Apartments from the National Statistics Institute (INE).

Clearly, the world of tourism has changed, adapting to what was available at the time while international tourism was quite limited. Consequently, despite significant recovery, the number of international travellers dropped -38.8% compared to 2019 while national travellers fell -17.9%.

Transformations in the tourist profile according to their origin are significant:

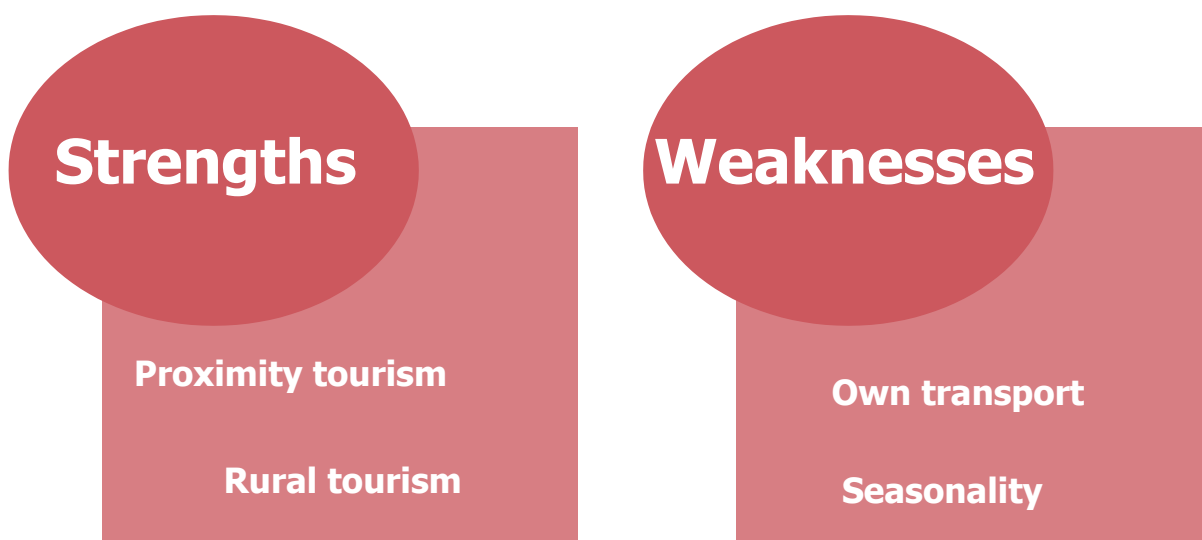
Travellers by place of origin

Total: 1,017,141



Tourism from the European Union fell by more than -50% on 2019 and from outside Europe, this figure was as much as -71%. Even within national tourism, local-rural tourism (from the same Autonomous Community) has been strengthened, registering an increase of +21.4% on the pre-pandemic period being considered, while tourism from Madrid dropped by -31.3%, to give one example.

In the light of this situation, Navarre demonstrated clear strengths and weaknesses in 2021:



Navarre is an Autonomous Community whose tourism is traditionally characterised as proximity tourism. Its main resource is nature, so it is rural tourism, away from large crowds clearly a strength in this context. However, the personal transport generally used in this type of tourism has a clear impact on the environmental footprint and the seasonality of this mobility, which directly affects **KEY** factors in the sector in our Autonomous Community: **SUSTAINABILITY** and **CIRCULARITY**. These factors come hand in hand with another inescapable transition which Navarre is reinforcing year on year: **DIGITALISATION**.

MAJOR MILESTONES OF 2021

MILESTONES









1. DATAMART Smart Tourist System

This was an important year in terms of designing and building the Smart Tourist System called DATAMART. This is a platform which compiles and presents the most relevant tourist information on Navarre, at both a public and internal level.



Sistema de Inteligencia Turística (SIT)

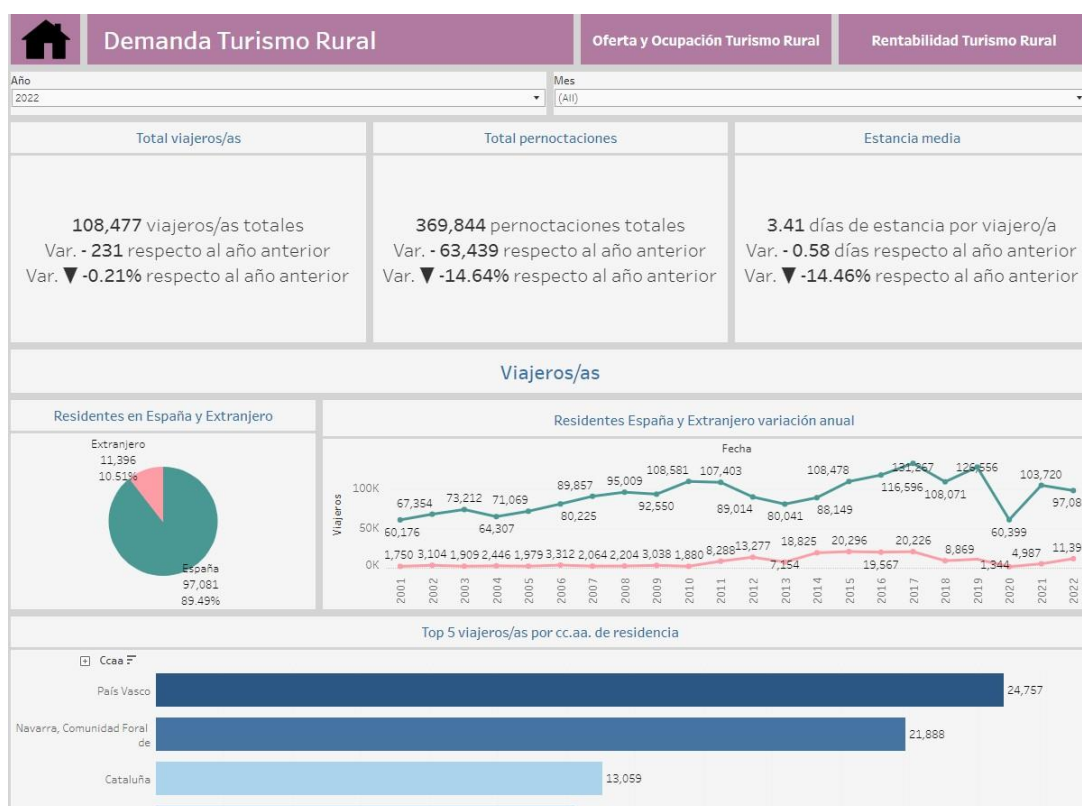
En esta plataforma digital, puedes visualizar de forma dinámica los principales datos sobre el turismo y su evolución en el tiempo, así como realizar comparaciones.

| | | | |
|--|---|---|---|
|  Alojamientos turísticos |  Competitividad |  Demanda turística |  Economía del Turismo |
|  Oferta turística |  Segmentos turísticos |  Tráfico Aéreo |  Oficinas turísticas |

1. DATAMART Smart Tourist System

The tourist information sources chosen to provide the system with content, at a public level, are as follows:

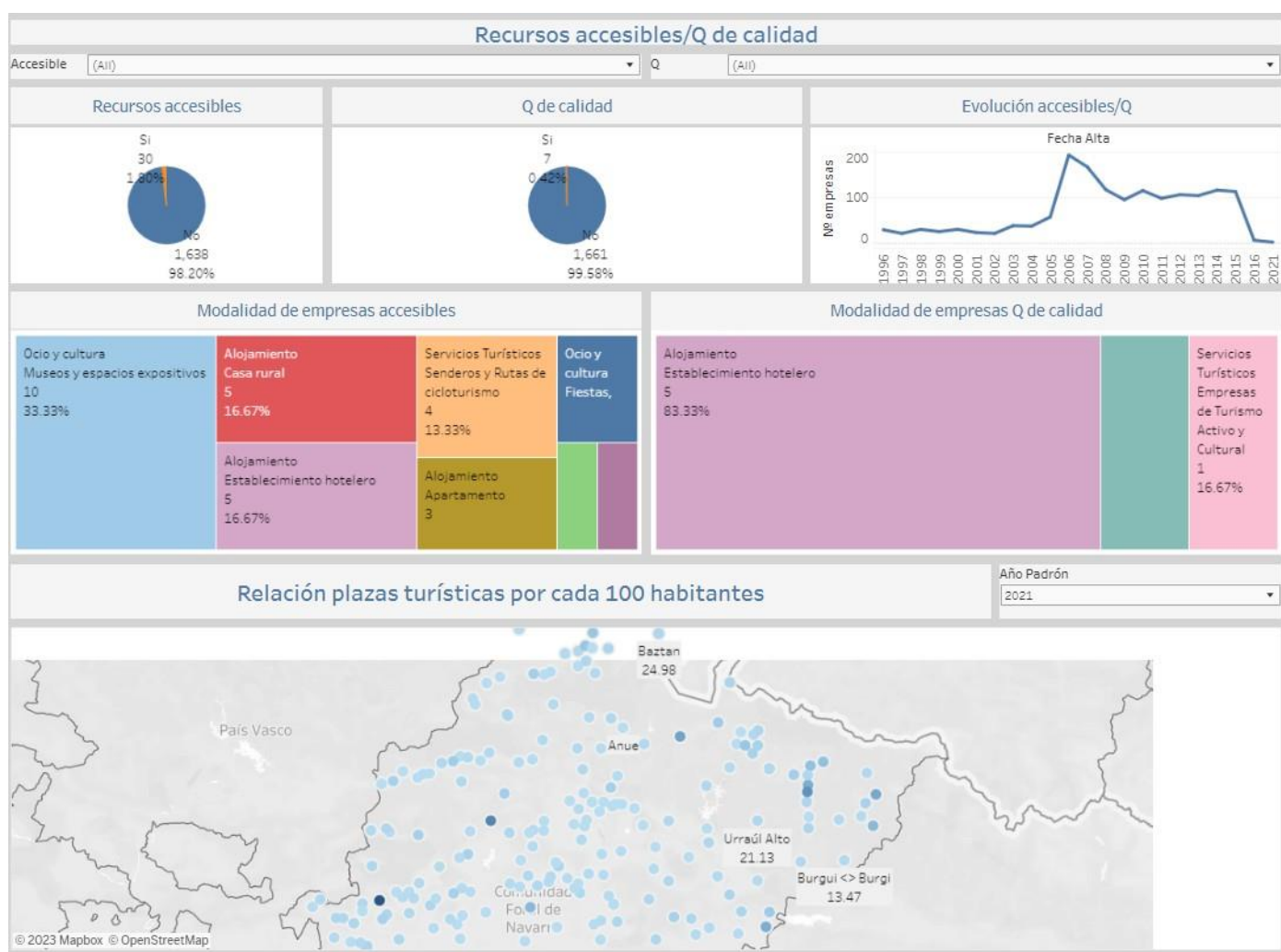
- INE: National Institute of Statistics
 - o Tourist establishment occupation surveys
 - o FRONTUR. Statistics on tourist movements at the Spanish borders
 - o EGATUR. Tourist spending survey.
 - o Resident Tourism Survey.
- AENA: Passengers and commercial flights in Pamplona airport
- WIKILOC-SENDEROS: Information on hikers and cyclists on hiking trails in Navarre.
- NAVARRE TOURIST OFFICES: Enquiries
- Fixed and mobile ECO-COUNTERS at various locations on Greenways, the Way of St James and in various tourist locations.
- PILGRIM HOSTELS: stamping pilgrim passes in the Roncesvalles Hostel and in the Jesus y María Hostel (Pamplona).
- TOURIST RESOURCES: information on visitors to the main tourist resources in Navarre.



Internally, the annually systematised information reports on:

- Grants or subsidies
- General training
- Webinar training
- Student / teacher satisfaction survey
- Website visits www.visitnavarra.es: source: Google Analytics

The System was set up with this information, but the sources which are used are constantly being revised and new sources added (experimental, from mobile data, related to projects developed by the Observatory, etc.).



2. Digital transition

Progressive support for digitalisation of the sector has been seen over the last few years by setting up the Digital Transformation Laboratory in the Navarre tourism business world.

This project continued in 2021, initially begun as a pilot experience in 2020 by the General Directorate of Tourism, Trade and Consumption, working with the public company NASERTIC and RoundCubers (a group of tourism experts). This year, 20 new companies will be added to the Laboratory including:

- Online training.
- Development of the Digital Transformation Plan in company.
- Personalised advice (mentoring).
- Action plan.
- Selection and management of suppliers.

The Laboratory is currently in its fifth edition, proving its resounding success.



Fondo Europeo de Desarrollo Regional: "Una manera de hacer Europa"
Eskualde Garapenako Europako Funtsa: "Europa egiteko modu bat"

Financiado como parte de la respuesta de la Unión a la pandemia de COVID-19

COVID-19aren pandemiaren aurrean Europar Batasunak izandako erantzunaren zati gisa finantzatua

3. NECSTouR

In 2021, Navarre joined the NECSTouR European network for sustainable and competitive tourism. Within this network of regional destinations, we work to promote sustainable tourism. Our participation in the Tourism of Tomorrow Lab deserves a special mention.

Within this framework, we took part in two new lines of work in 2021.

Firstly, we analysed tourist flows in protected natural areas. This uses anonymised data from car park reservations in one of Navarre's main tourist resources, the Nacedero de Urederra (Urederra River Source Nature Reserve).

This project is a step forward as it provides data in far greater detail than previously analysed, including information such as: point of origin, how far in advance the reservation was made, average occupation per vehicle. This information is useful for sustainable management of the tourism-natural resource.

Secondly, definition began on a project to devise a set of sustainable tourism indicators working with Andalusia, the Valencian Community and Catalonia. This project is driven by the sector's implication in the regions, experts and the applicability of the indicators.



NECSTouR
European Regions for
Competitive and Sustainable Tourism

4. Research and analysis

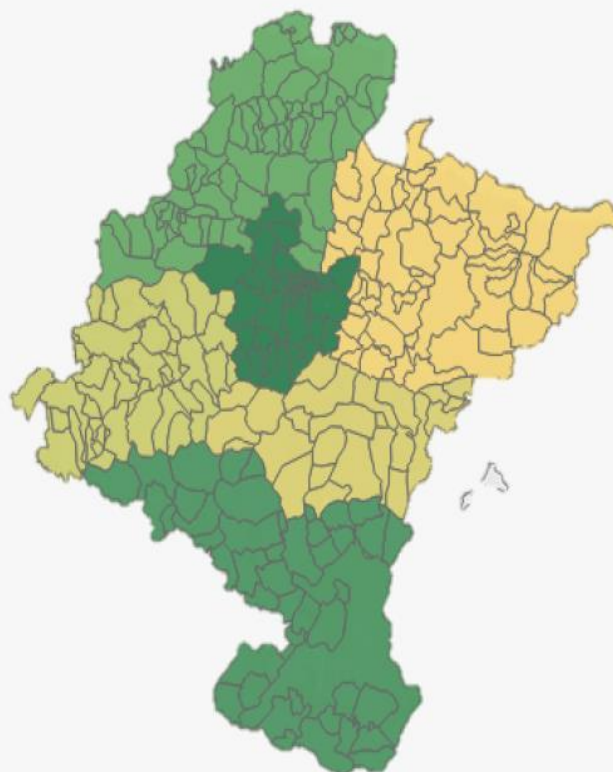
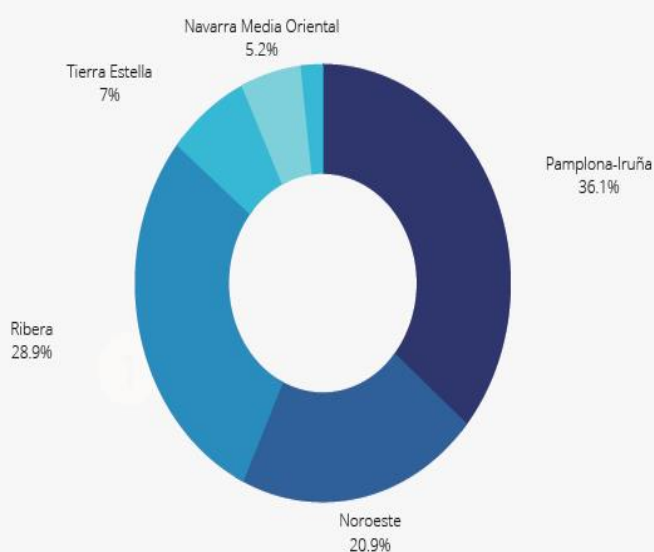
STUDY 1. ORANGE. Analysis of the potential tourist demand for Navarre and tourist preferences, using Web Browsing data.

Study performed by the Navarre Tourism Observatory working with the Public University of Navarre (UPNA) for which Orange provided the data.

The study uses web browsing data from Internet users in Spain between 15 March and 14 April 2021 to analyse Navarre's position nationally, most visited products and zones, profiles of people browsing the websites and comparison with competitors.

Zonas más visitadas de Navarra:

- **Pamplona y comarca** es la zona más visitada
- seguido por **La Ribera** y **Noroeste**
- la popularidad de zonas **varía** considerablemente según el **origen del usuario** y **producto turístico**.



4. Research and analysis

STUDY 2 EMPATH. Listening to social media and online media

Study performed for the Navarre Tourism Observatory by Empath Design, which listens to users talking about the brand/product/service in all public areas on the Internet and categorises these opinions according to user profiles, media and topics/subtopics.

Finally, it highlights the users' wishes and recommends actions to achieve visibly satisfied users.



4. Research and analysis

STUDY 3 INSPEKTOUR. Destination Brand 21. Thematic competence for tourism destinations (Navarre region), source markets: Germany and Spain.

Study carried out for the Navarre Tourism Observatory by Inspektour. The report falls within the series of Destination Brand 21 studies carried out by Inspektour since 2009, also consulting the German Tourism Research Institute.

In this case, the analysis worked from the German and Spanish market regarding the offer and demand for particular tourism skills in the Navarre region. It also includes analysis, comparing it against other tourist destinations.

4.2 Supply: Supported theme suitability – Specific themes by subgroups

Supported theme suitability of the specific themes

> In your opinion, to what extent is the following domestic tourist destination suitable for the holiday activities below (regardless of your own interest in the holiday activities)?

> Top-two-box on a scale from "5 = very suitable" to "1 = not at all suitable" (in % of respondents)

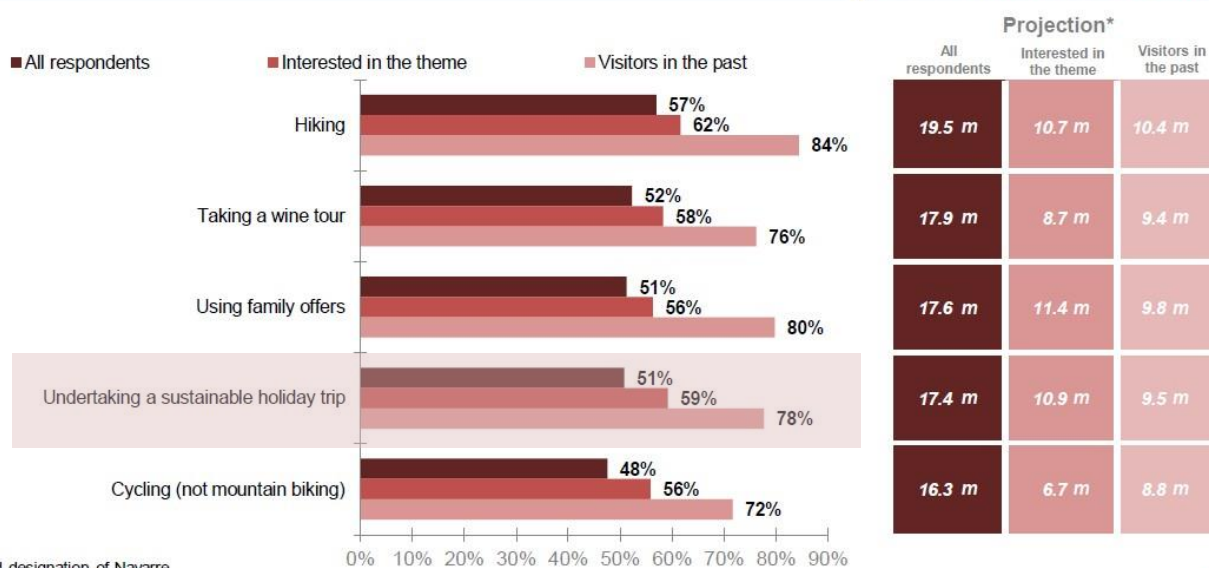
■ Navarra

Source market: Spain

Base: All respondents

Number of respondents: 1,000

Number of resp. by subgroups: varying



► Note: Queried designation of Navarre for Spanish respondents = "Navarra"

* Projection of the absolute volume of the attributed suitability of each theme (number of people).

Source: inspektour (international) GmbH, 2021



4. Research and analysis

STUDY 4 GHG from Tourist Information Offices

Working from the principles that “if it isn’t measured, it can’t be improved” and starting with the fields directly influenced by the General Directorate for Tourism, Co2-eq emissions have been calculated for tourist offices run by the Government of Navarra.

The results from this specific study include a verified Co2-eq footprint and an improvement plan. The Energy Management section will also mention this study.



MONITORING AREAS



GOVERNANCE

Tourism Action Plan 2020-2022:

The sector's governance during 2021 continued to be regulated by the Tourism Action Plan 2020-2022, developed to provide an immediate response to the situation caused by Covid-19.

This action plan intended to strengthen the Navarre business world and was divided into 7 strategic lines:

Strategic lines:

- 1** Governance and participation
- 2** Subsidies
- 3** Training
- 4** Product adaptation
- 5** Innovation
- 6** Tourist intelligence
- 7** Communication and marketing

Navarre Strategic Tourism Plan 2018-2025:

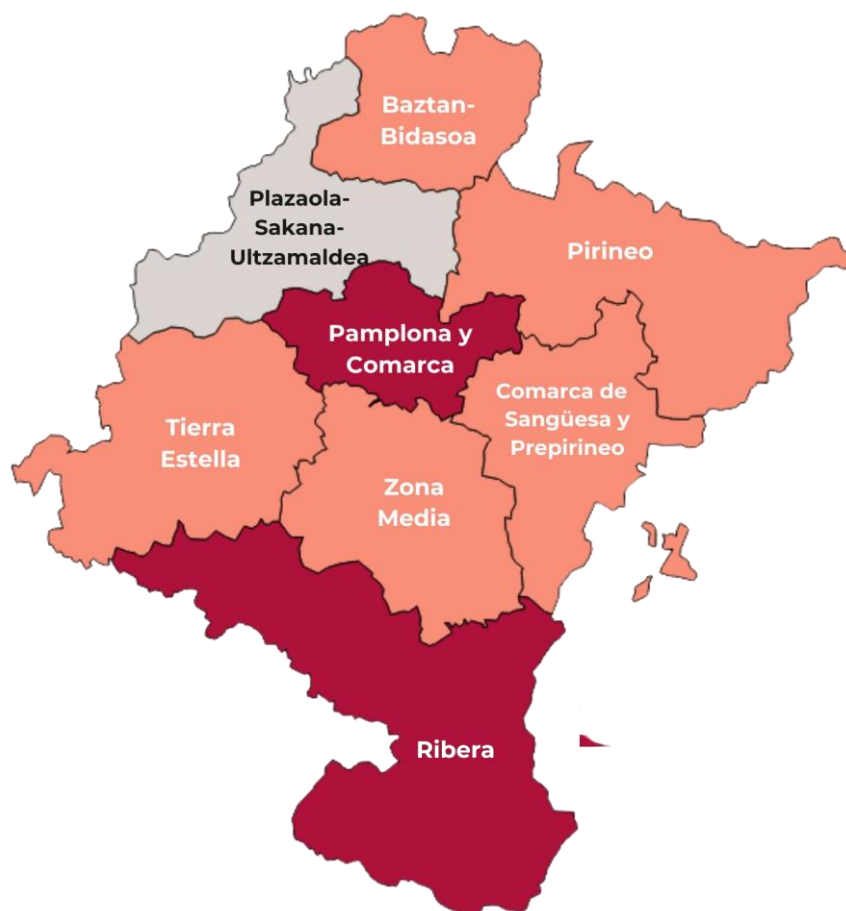
The framework developed by the tourism strategy from 2018 to 2025 is the Navarre Strategic Tourism Plan. This Plan determines 8 Tourist Space Management Units (UGET), set up during 2021.

Tourist Space Management Units (UGET)

In terms of service provision, the functions of these UGET will be to:

- Work together on the best planning of the local tourist space.
- Update and improve information on resources and the tourism offer.
- Help to devise activities which make the best use of the territory's resources.
- Help to improve professional skills and qualifications for their local establishments.
- Provide tourists with services in their destination.
- Produce information on affluence, usage patterns and tourist satisfaction.

UGETS DE NAVARRA



From the S3 smart specialisation strategy, to S4 for sustainability:

Integral tourism was chosen as one of the six priority areas for the S3 Smart Specialisation Strategy, because it was considered an area with key competitive advantages for Navarre's economic development.

During 2021, Navarre updated its Smart Specialisation Strategy, according to the European Commission requirements for regions to gain access to structural funds in the new European budgetary period 2021-2027.

These transformations have brought about the S4, a strategy which spotlights sustainability, and where tourism, in this case sustainable tourism, has once again become a strategic area.

TURISMO SOSTENIBLE



Visión 2030

Navarra se consolida como un destino singular de referencia, apostando por un turismo sostenible basado en sus fortalezas naturales, culturales, gastronómicas y sociales, facilitando la cohesión territorial y la apertura internacional.



Foco

Sostenibilidad ejemplar de los destinos y recursos turísticos

Servicios digitales de personalización y atención al turista

Turismo convivencial



S4 | Navarra
Nafarroa

The Government of Navarre allocated a budget of €11.5 million to Tourism in 2021.



The budget for tourism in 2021 was 10% higher than in 2020 and 17% more than in 2018.

Compared to the Government of Navarre's overall budget, the amount designated to tourism represents 0.23%, a similar percentage to 2020 and previous years: 0.22% in 2019 and 0.25% in 2018.



TOURISM SEASONALITY

A major aim of the aforementioned Strategic Tourism Plan for Navarre 2018-2025 is to position Navarre-Pamplona in the European tourism market to **capture deseasonalised demand flows**, with high mean daily spending in the destination.

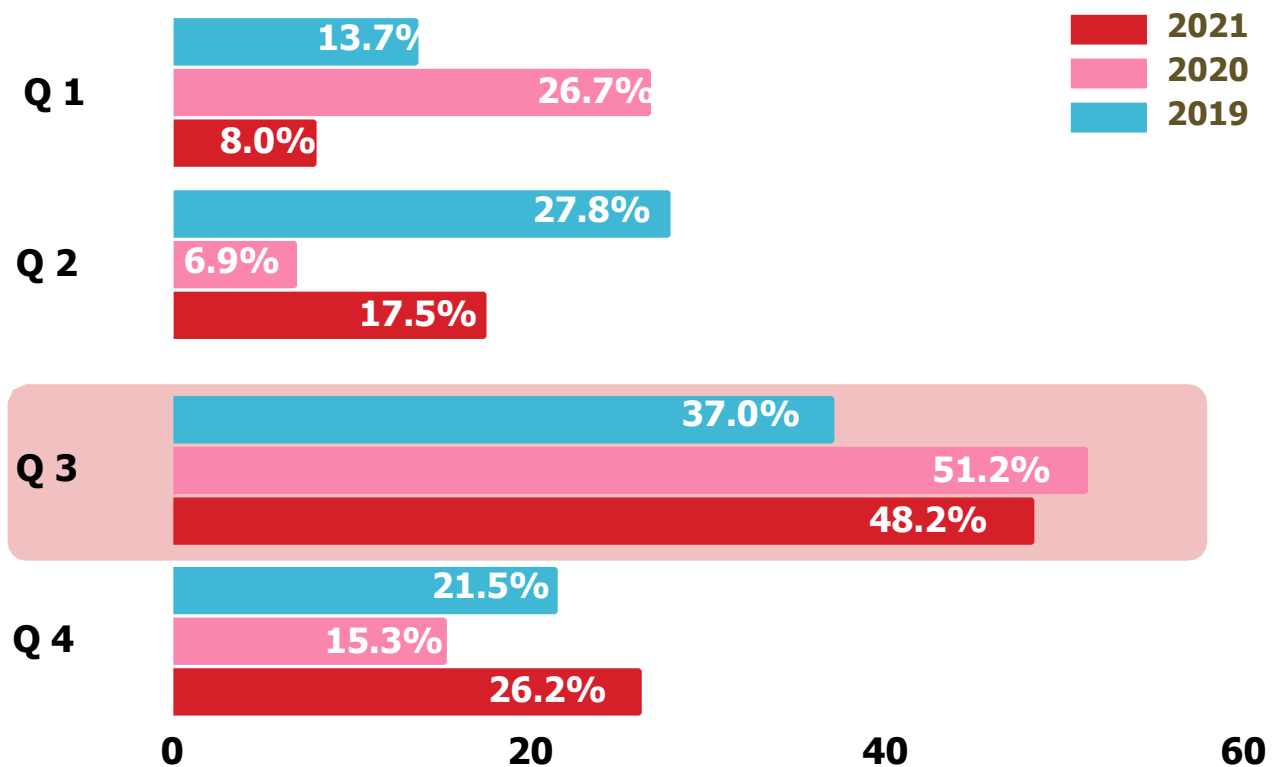
The aim of deseasonalizing tourist affluence is not only to make an economic impact on the destination, but it also side-steps overcrowding issues and environmental and social decline.

The Covid-19 pandemic, and the mobility restrictions it brought, were present in Navarre for most of 2021. Furthermore, a perimeter closure was declared for the whole province from 22 October 2020 to 9 May 2021, meaning that it could not receive tourists from other Autonomous Communities. Consequently, any recovery of tourism was mainly noted in the second half of the year. This means that 2021 also presented high seasonality indicators compared to 2019.

48% of tourists travelled to Navarre in the summer months

Beginning with the distribution of tourists in regulated accommodation in Navarre, the first and second semester presented vastly different figures, split into 25.5% in the first and 74.5% in the second. This was much more unequal than in 2019 when the first and second semester presented figures of 41.5% and 58.5% of visitors to Navarre respectively.

Percentage distribution of the number of tourists by quarter

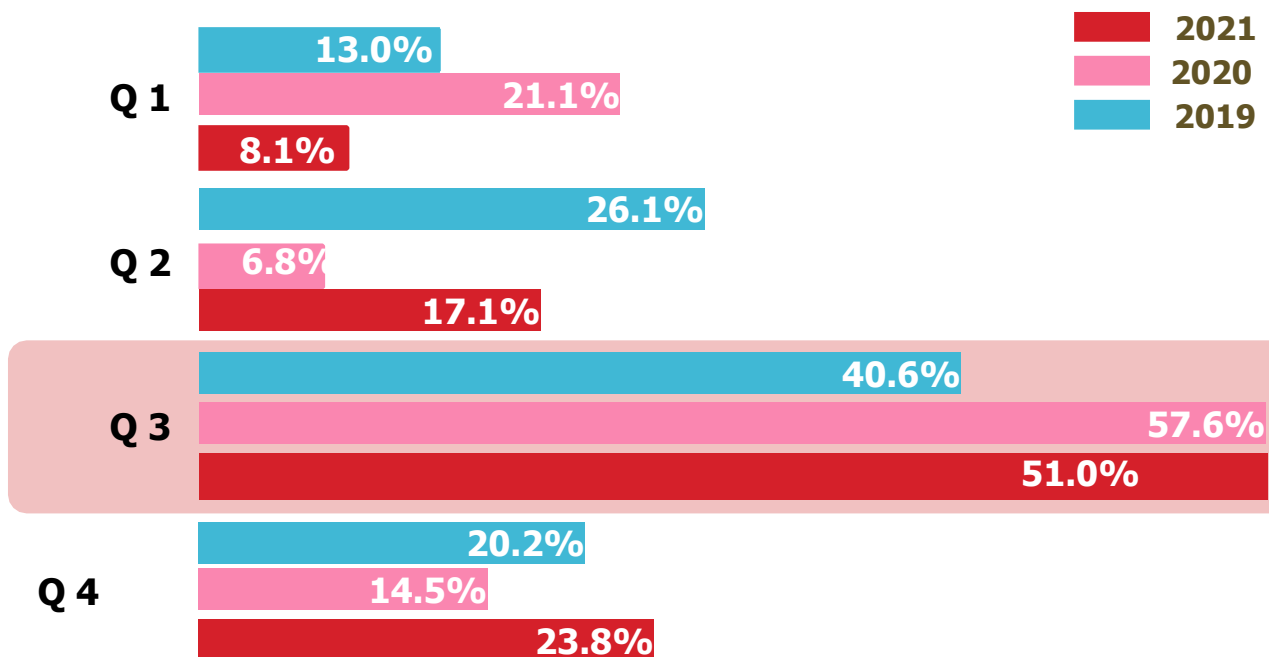


Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites, Apartments and Hostels from the National Statistics Institute (INE).

The proportion of tourists in the third quarter was 38% higher than in 2019.

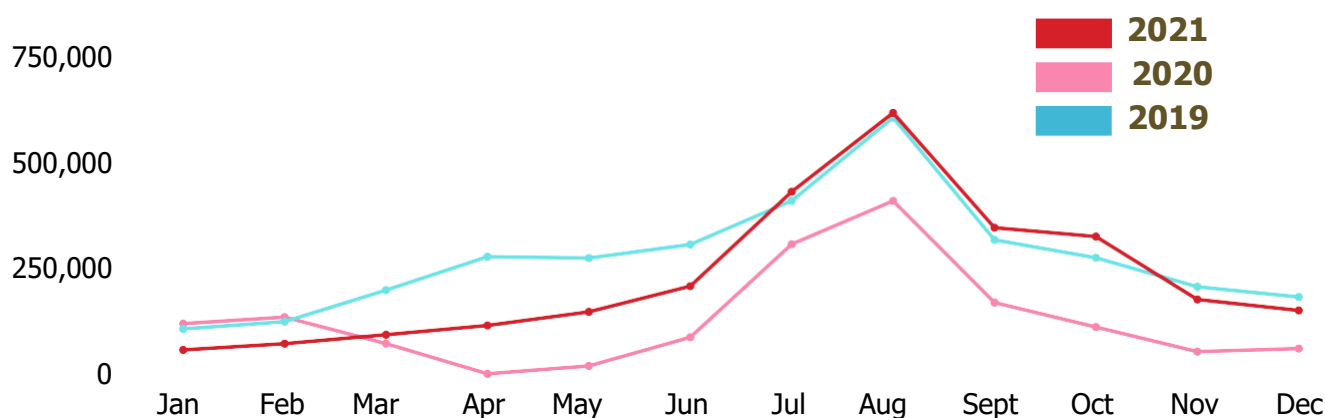
57.6% of overnight stays were concentrated in the third quarter

Percentage distribution of the number of overnight stays by quarter



Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites, Apartments and Hostels from the National Statistics Institute (INE).

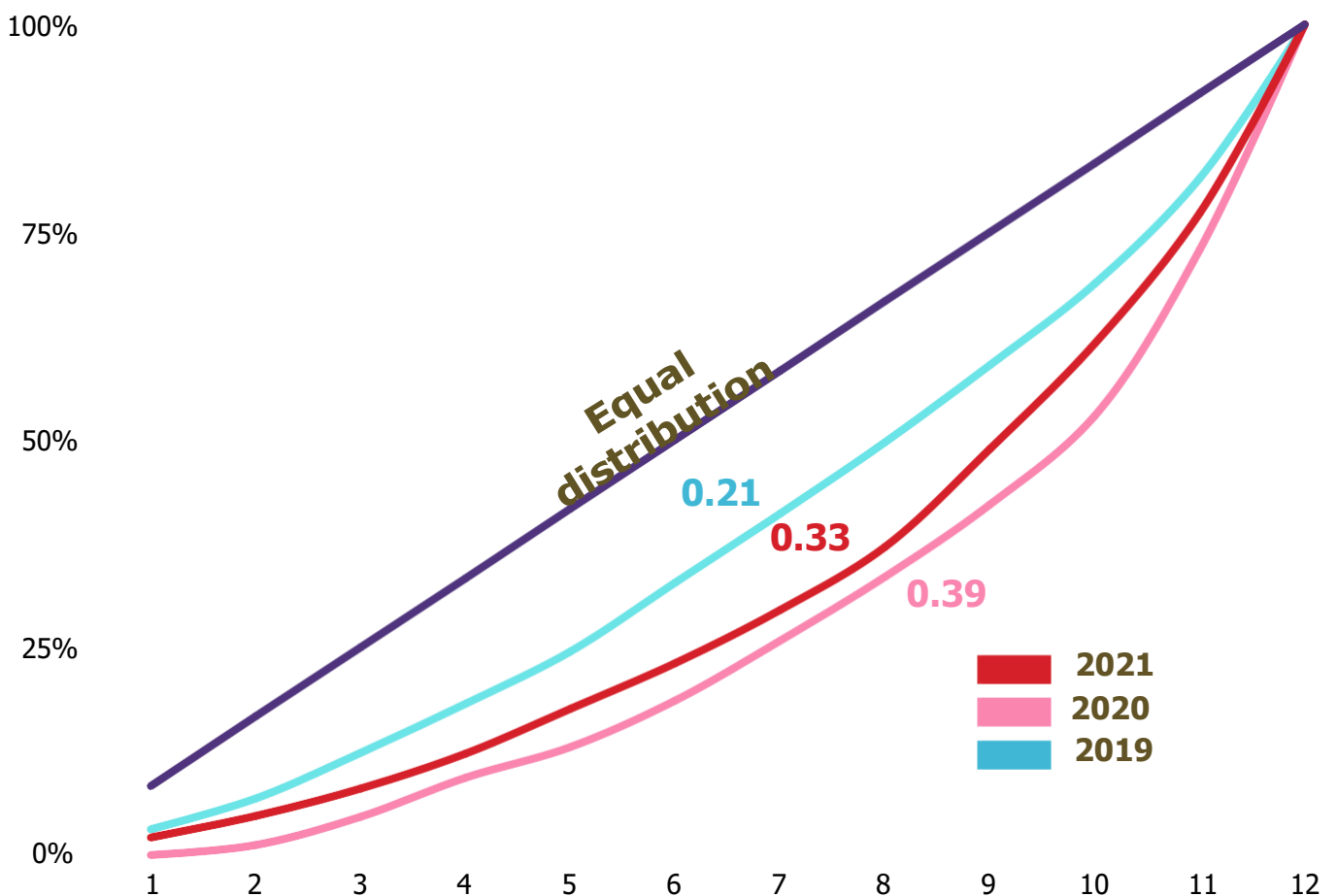
Distribution of overnight stays by month as a proportion of the total



The Gini Index can be used as a reference to analyse changes in the degree of seasonal concentration of tourist flows. This indicator quantifies the degree of equal/unequal distribution of tourists and overnight stays, so that **0** indicates that all the travellers/overnight stays are distributed equally over the year (deseasonalised flow) and **1** means that all the tourists are concentrated in one month (high seasonality).

The Gini Coefficient corresponding to 2021 shows that for both travellers and overnight stays, the distribution was more equal than in 2020, although, it remains considerably above the 2019 level. Once again, this is mostly a consequence of the pandemic.

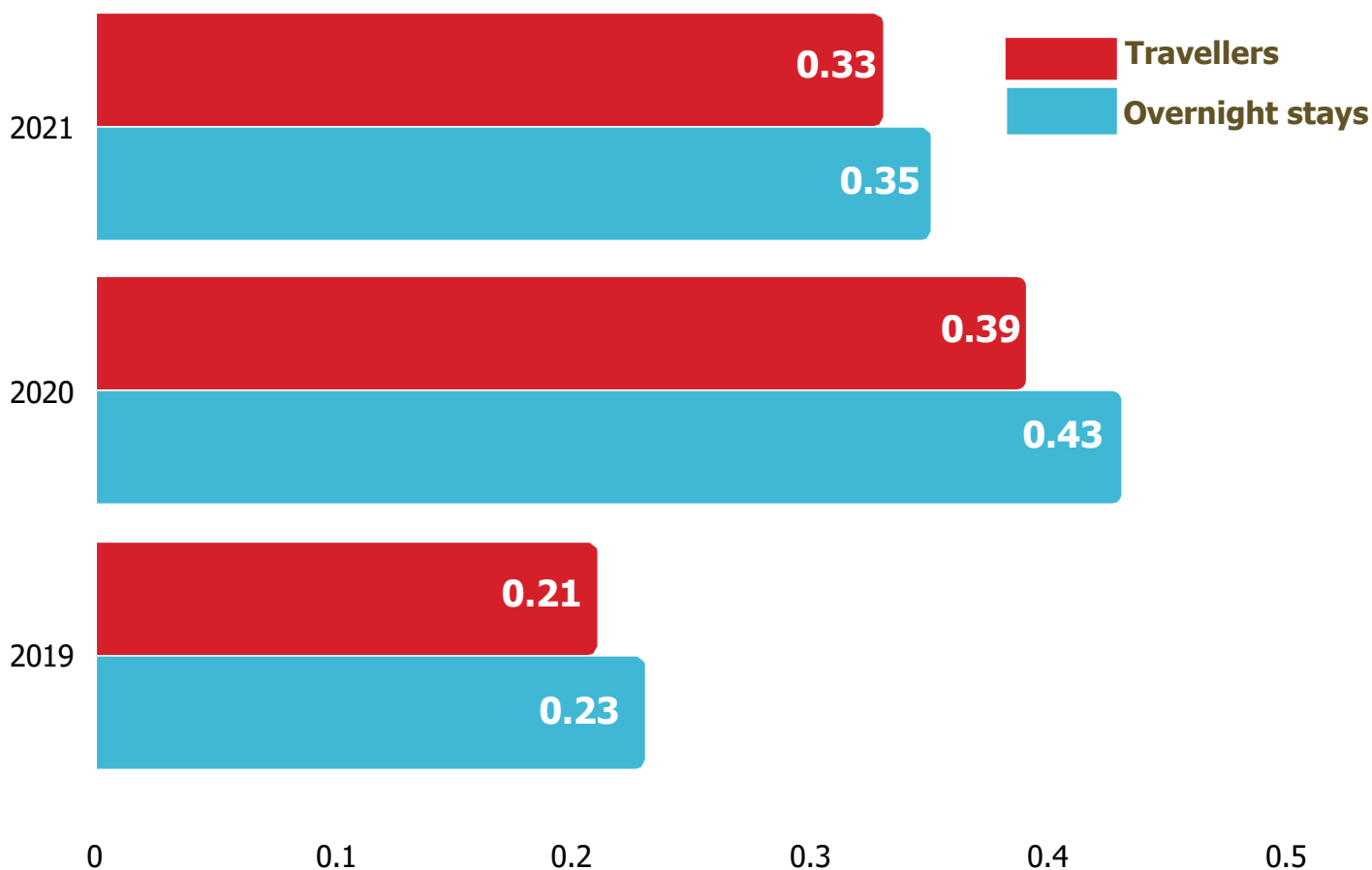
Distribution of tourists by month from lowest to highest occupation



Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites, Apartments and Hostels from the National Statistics Institute (INE).

While 2019 presents a value of 0.21 in the distribution of travellers and, in 2021 it was 0.33, an improvement on 0.39 in 2020.

Gini Index travellers/overnight stays



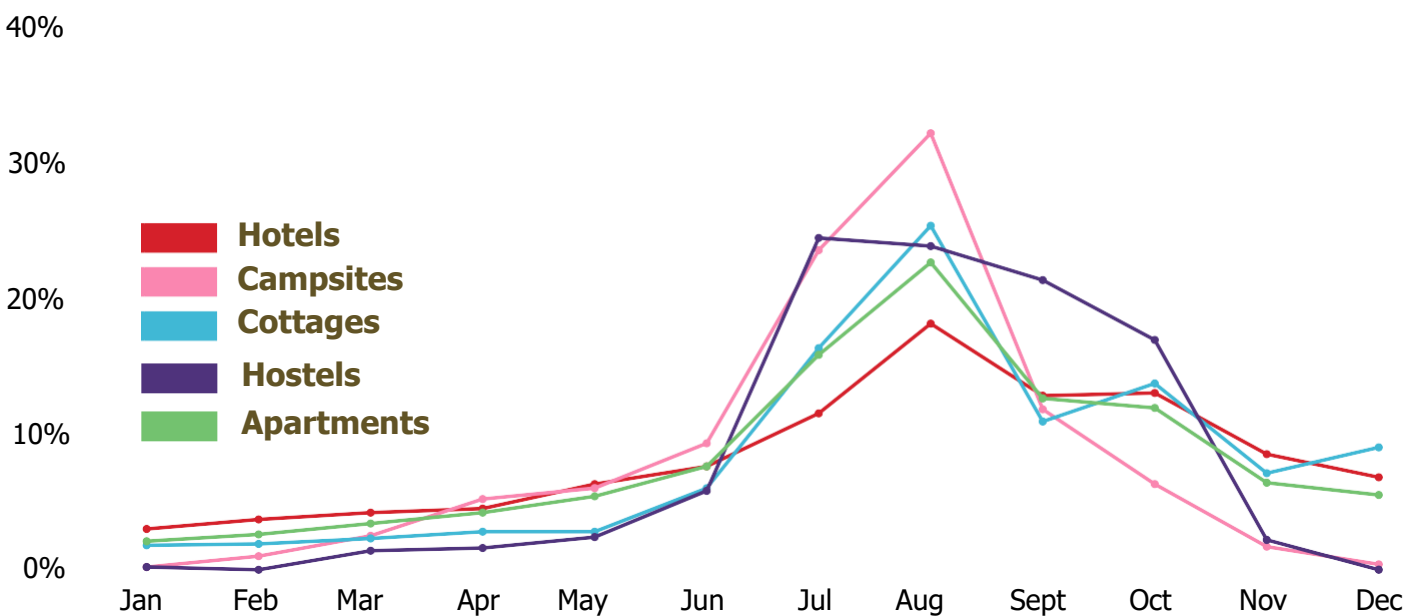
Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites, Apartments and Hostels from the National Statistics Institute (INE).

GINI types of accommodation / overnight stays



Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites, Apartments and Hostels from the National Statistics Institute (INE).

Distribution of overnight stays by type of accommodation 2021



Source: Own work using data from Occupation Surveys in Hotels, Rural Tourism, Campsites, Apartments and Hostels from the National Statistics Institute (INE).



EMPLOYMENT

The figures in the previous report reflect how the tourism sector was heavily impacted by Covid-19 in terms of employment.

However, the number of Social Security affiliates at the end of 2021 demonstrates 9% growth in employment compared to 2020. This still leaves an 8% recovery margin compared to pre-crisis levels (2019).

In absolute figures, in December 2021, Navarre registered 17,147 people working in tourism. The only branch where this figure does not increase is "tour operators".

Employment in the sector represented 6% of the total workers in Navarre.

17,147 Social Security affiliates in the tourist branches (8.9% more than in 2020)



Accommodation services

2,375
+8.2%



Food and drink services

14,440
+9.4%



Tour operators, etc.

332
-6.7%

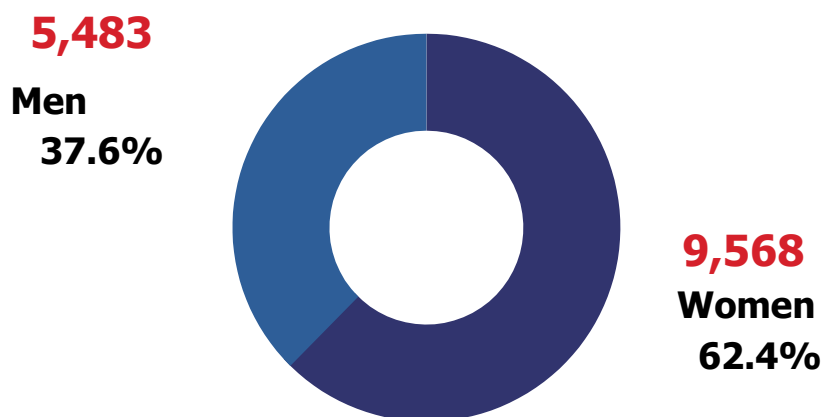
The number of male workers increased to a greater extent than female workers.

Feminisation, a major characteristic of tourism sector employment, remains the same.

Male employees saw greater employment recovery in 2021, while job losses during Covid-19 mainly affected women.

Consequently, male affiliates reached figures of 6,452 persons, 11.5% over the previous year, and women accounted for 10,695 which was +7.3%.

Despite this, 62% of tourism employment is still female, although this percentage reached 63.6% in 2021.



Registered unemployment

Recovery of employment is also reflected in the unemployment figures registered by the Navarre Employment Service. On 31 December 2021, unemployment in this sector affected 2,788 persons (74% women), 33% less than on the same date 2020.

Unemployment in tourism industries represents 8.7% of total unemployment in Navarre.

Snapshot of Tourism-related Employment in Navarre in 2021



62% of people working in the sector are women and 74% of unemployment is also female, despite an 8.9% increase of Social Security affiliates in 2021.



The food and drink services, most affected by Covid-19, were also the area which recovered the best in 2021, reaching 14,440 workers, +9.4% than in 2020.



The increase in affiliates working on a contract represents +11.8%, while freelance workers increased +0.6%.



58% of affiliates were working on full-time contracts, a 2% drop.

7 out of every 10 men had full-time contracts, compared to 5 in 10 women.



Pamplona and Tudela saw the greatest increase in employment, +63% and 11% respectively. Meanwhile, the increase was just 3% in the Pyrenees.

Source: Data provided by the Navarre Institute of Statistics - Nastat, from the General Social Security Treasury.

ECONOMIC BENEFITS IN THE DESTINATION

Improving the economic benefits of tourism is a strategic objective for Navarre, because tourism in the destination has traditionally been an “activity highly characterised by domestic tourism and scarce internationalisation. This generates a short and seasonalised average stay, with a low capacity to generate spending.” For this reason, the Navarre Strategic Tourism Plan includes the following objectives:

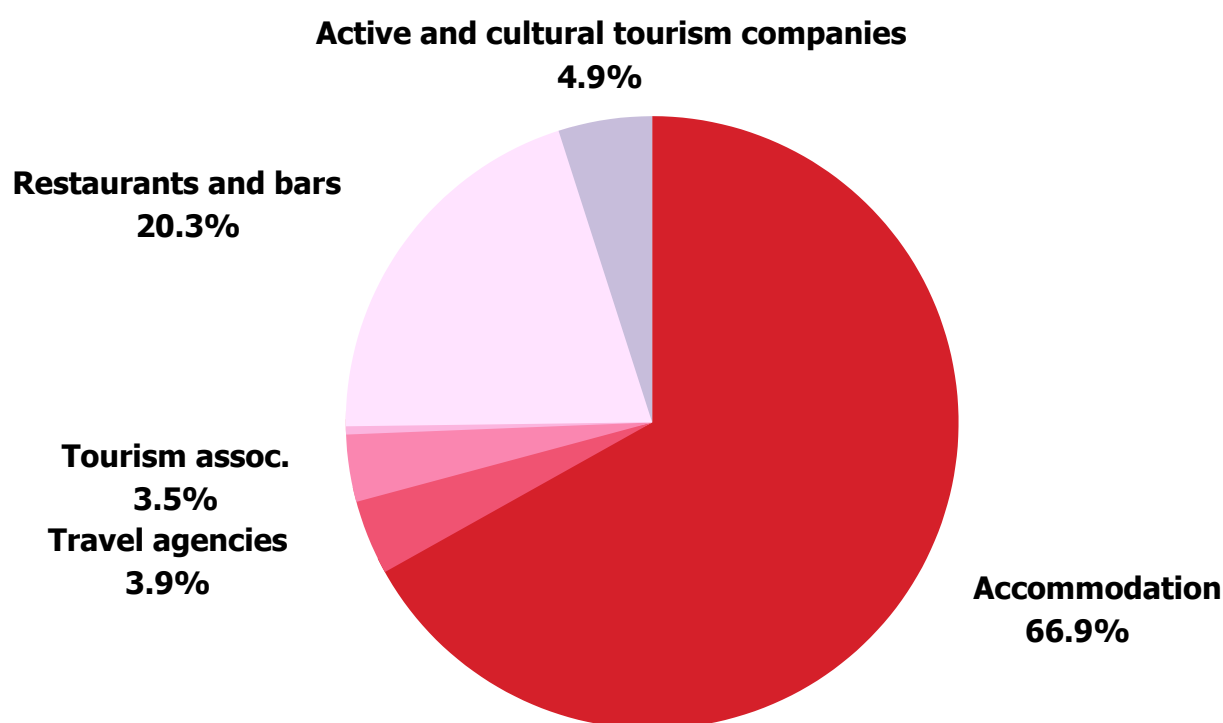
“Position Navarre-Pamplona in the European tourism market to capture deseasonalised demand flows, with high average daily spending in the destination.”



Business world

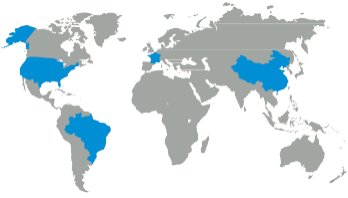
An analysis of the economic benefits must also analyse the business world. The main resource to study this aspect is Navarre's own register of tourism enterprises, known as InfoReyno.

This register includes accommodation and tourist activity companies such as restaurants and bars, although the latter join the register voluntarily.



Source: Own work using data from the InfoReyno register, run by the Government of Navarre.

In total, 3,297 tourism companies have been registered, of which 66.9% are accommodation, followed by 20% restaurants and bars.



SPENDING FROM INTERNATIONAL TOURISM



TOTAL SPENDING

**€287
Million**

▲ +44% (2020)

▼ -27% (2019)



AVERAGE SPENDING PER PERSON

€145

▲ 18% (2020)

▲ 12% (2019)



DAILY SPENDING PER PERSON

€116

▲ +27% (2020)

▲ +31% (2019)

Source: Experimental statistics. Distribution of spending by foreign visitors during their visits to Spain (EGATUR+PST) National Statistics Institute (INE).

Regarding the total tourist spending in Navarre, we mainly have two sources of information: the EGATUR surveys and experimental statistics which combine EGATUR data with PST data. According to this source, Navarre was the third Autonomous Community in terms of average daily spending during 2021. France was the country with the highest proportion of spending in Navarre, 73.5%.

SPENDING FROM INTERNATIONAL DAY-TRIPS



TOTAL SPENDING

€231.6 million

▲ +94% (2020)

▲ +5% (2019)



AVERAGE SPENDING PER PERSON

€129

▲ 39% (2020)

▲ 43% (2019)

Source: Tourist Expenditure Survey for international tourists (EGATUR). National Statistics Institute (INE).



SPENDING FROM NATIONAL TOURISM



TOTAL SPENDING

€316.4 million



+40% (2020)



-22% (2019)



AVERAGE SPENDING PER PERSON

€163.9



+24% (2020)



+18% (2019)



DAILY SPENDING PER PERSON

€52.9



+36% (2020)



+12% (2019)

Navarre residents 22.8%



From other regions
77.2%

Out of the national tourist spending, €72.2 million was spent by people living in Navarre (22.8%) and 244.1 million spent by people from other regions of Spain.

SPENDING FROM NATIONAL DAY-TRIPS



TOTAL SPENDING

€116.1 million



+47% (2020)



+12% (2019)



AVERAGE SPENDING PER PERSON

€32.9



+5% (2020)



-3% (2019)

The spending in 2021 by tourists and day-trippers living in Spain was €432.5 million. This is -15% less than registered in 2019 but 42% more than in 2020.

Urederra, an example of sustainable management

Urederra is one of the Navarre's most visited tourist resources. It lies in a natural reserve and belongs to a small town council. In 2017, a study was run on visitor profiles and load capacity. A visitor flow management system was set up based on this study.



A car park was built, and a technician was employed to mind it.



Each car is charged €5 to park there and so, the car park generates revenue for the town council, and also facilitates maintenance.



LOCAL SATISFACTION

Local satisfaction with tourism management

“Promoting social tourism as a tool to become more competitive” features in the current S4 Smart Specialisation Strategy (2021-2027), described in the Governance section.

The sustainable and integral tourism proposed by Navarre does not just involve enjoying and caring for its natural spaces. It also fuels maintenance and development for its rural environments and cities, and focuses on not overcrowding, enhancing the charm of rural tourism, by sharing talks and stories with the people who live in the surroundings that they visit, something which makes tourism much more enriching and promotes a circular economy where everyone wins. This provides the basis for future tourism promotion campaigns in our Region.

| Lines of work | | BO | GT | DT |
|---------------|--|----|----|----|
| 01 | Green transition through sustainable mobility: Cycling tourism, green routes, and non-motorised itineraries | ● | ● | |
| 02 | Green transition in a sustainable management of tourist spaces. Regulation of access and flows of visitors | ● | ● | ● |
| 03 | Promoting energy efficiency in Navarre's tourist sector: energy improvement actions in establishments and energy certifications | ● | ● | |
| 04 | Digital transition through the development of digital tourism marketing and innovation in products and processes adapted to the digital market | ● | | ● |
| 05 | Digital transition in the tourist market smart system. Data collection on demand, preferences, and behaviours for decision-making in tourism marketing | ● | | ● |
| 06 | Enhancing competitiveness with the new model of tourism management in the territory. Implementation of Management Units (UGET) and transformation of tourist offices | ● | | |
| 07 | Promoting competitiveness through training to shape an innovative, sustainable, and accessible tourism offer | ● | | ● |
| 08 | Promotion of tourism based on local friendly activities as a tool for improving competitiveness | ● | | |

Note:
 BO: Business Opportunity
 GT: Green Transition
 DT: Digital Transition

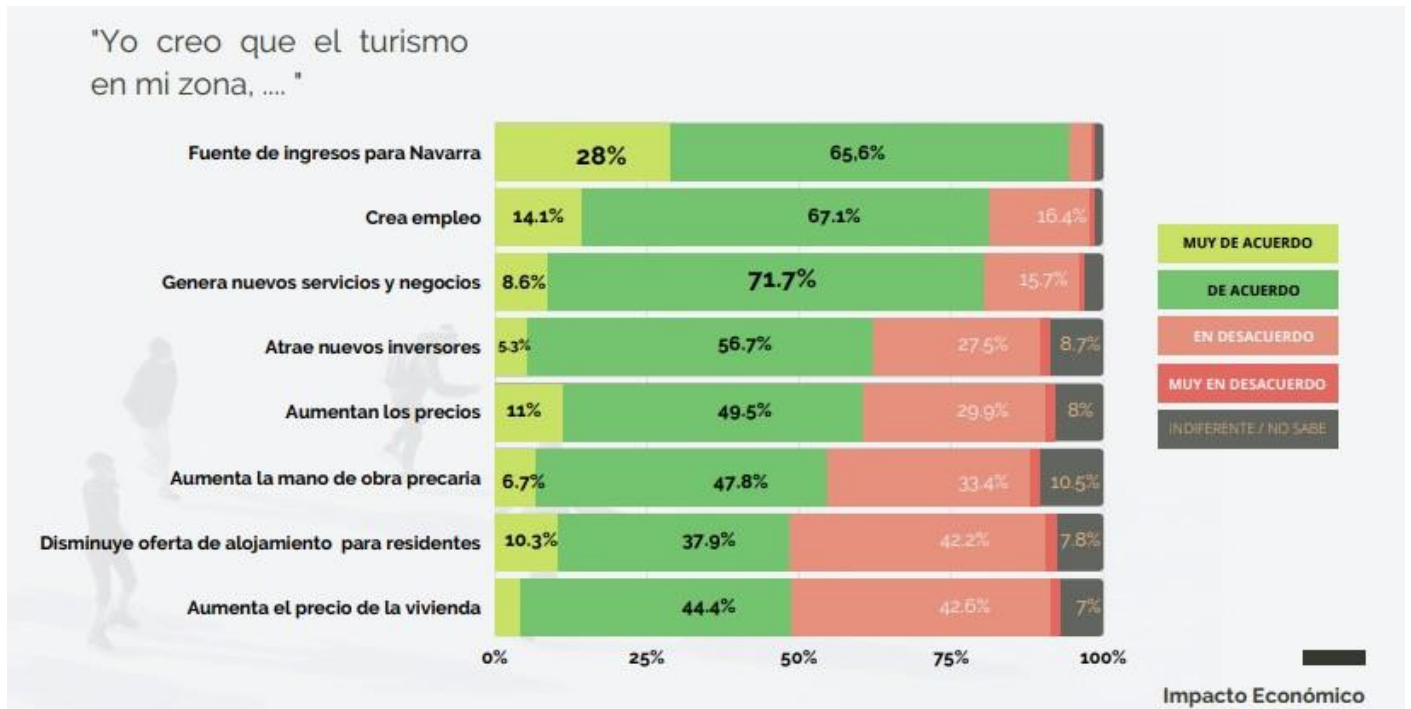
Basic indicators of local satisfaction

The main source of information relating to this field are data extracted from the 2020 study on how the Navarrese population perceives tourism development in their region. This study compiled the opinions of the Navarrese population regarding the general development of tourism and concerns from the resident population in this regard, working from a survey sent out to a sample of 850 people aged over 18.

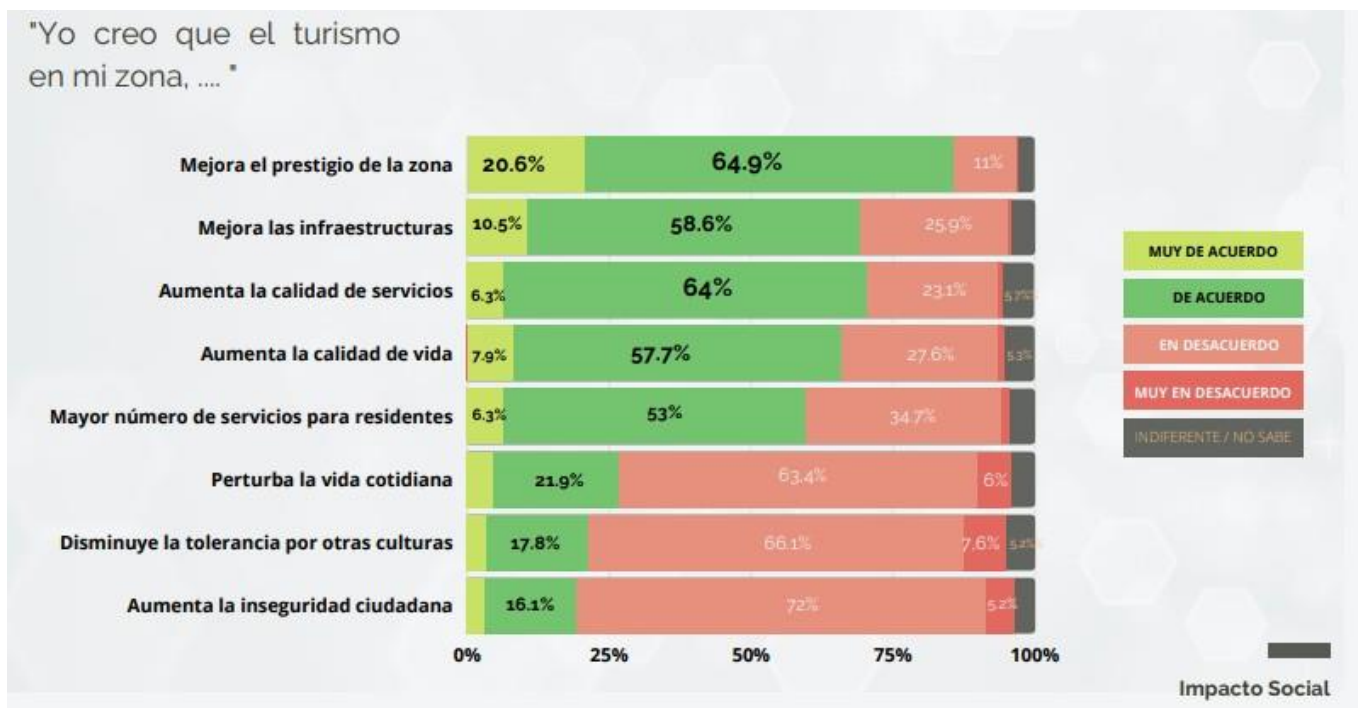
The questionnaire compiled these respondents' evaluations on four dimensions (economic, social, cultural and environmental impact) which will be monitored in future editions of this report.



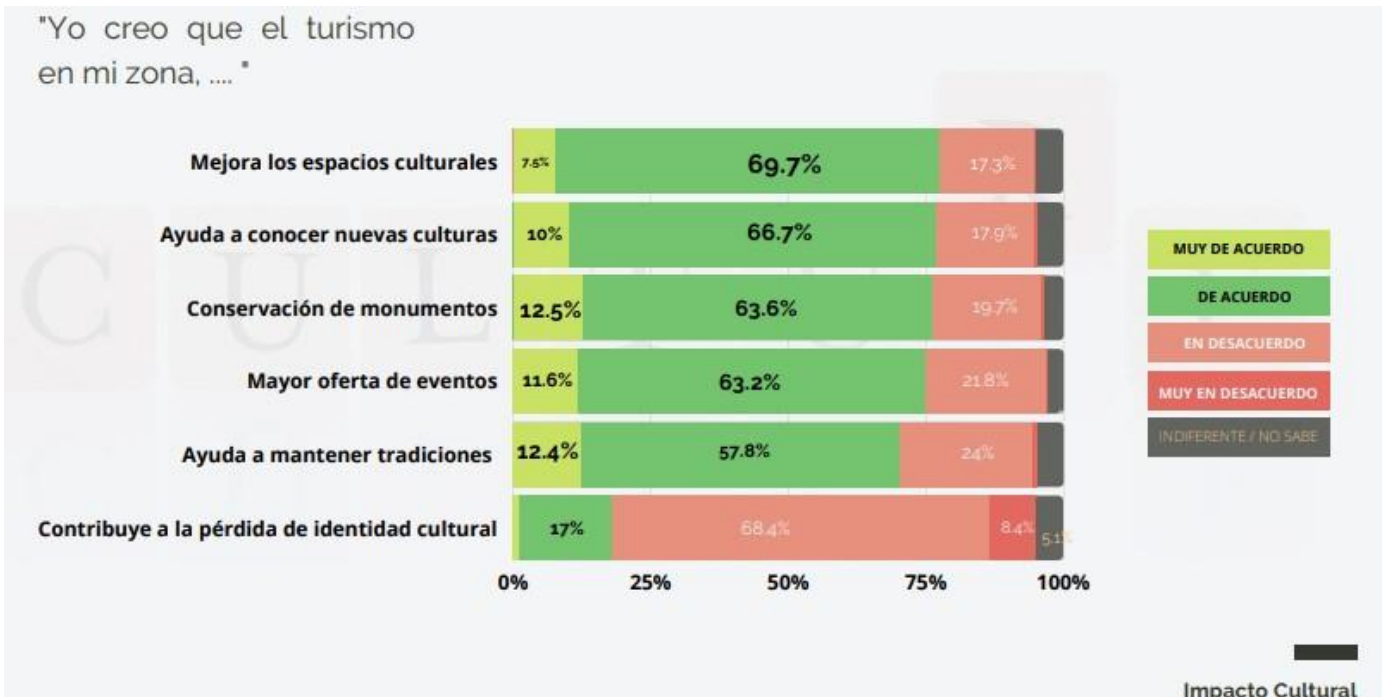
"94% consider that tourism is a source of revenue for Navarre."



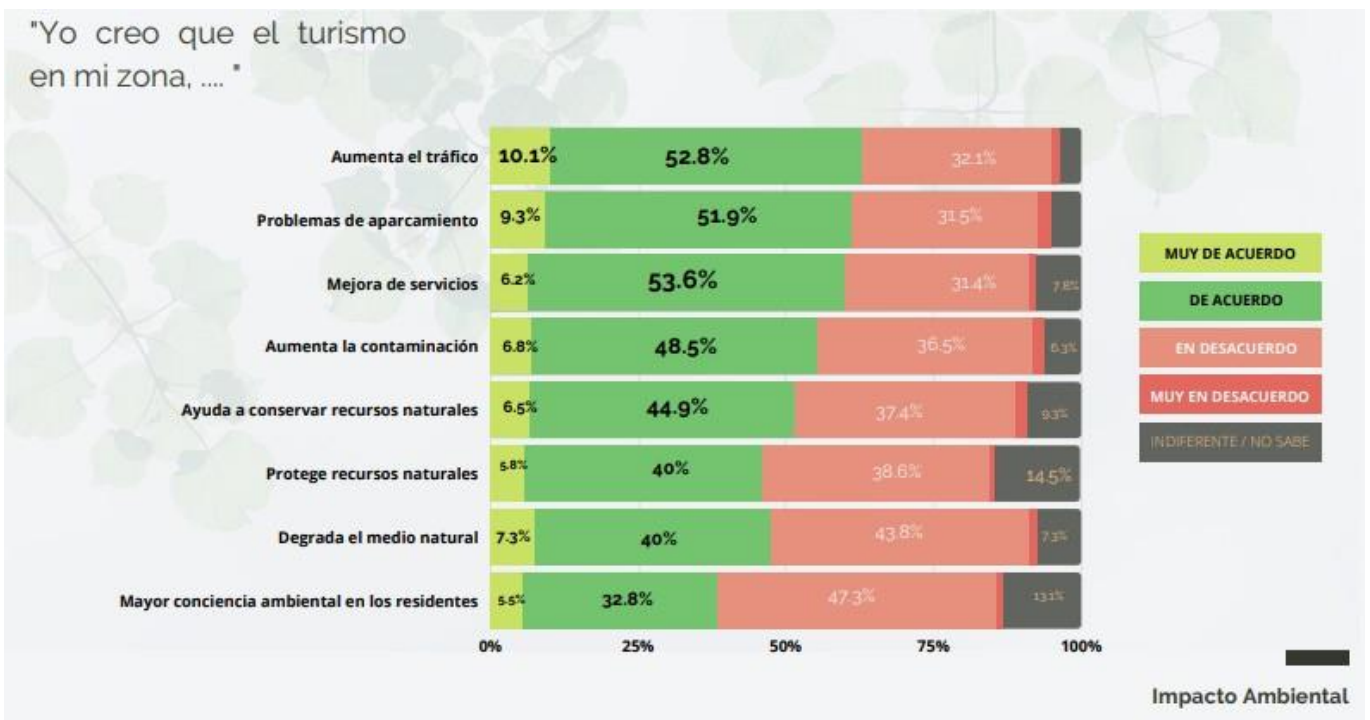
"85% agree that tourism improves the prestige and image of my area."



“77.2% agree with the statement that tourism improves cultural spaces in local populations.”



“59.8% think that services improve thanks to tourism, such as keeping the town clean.”



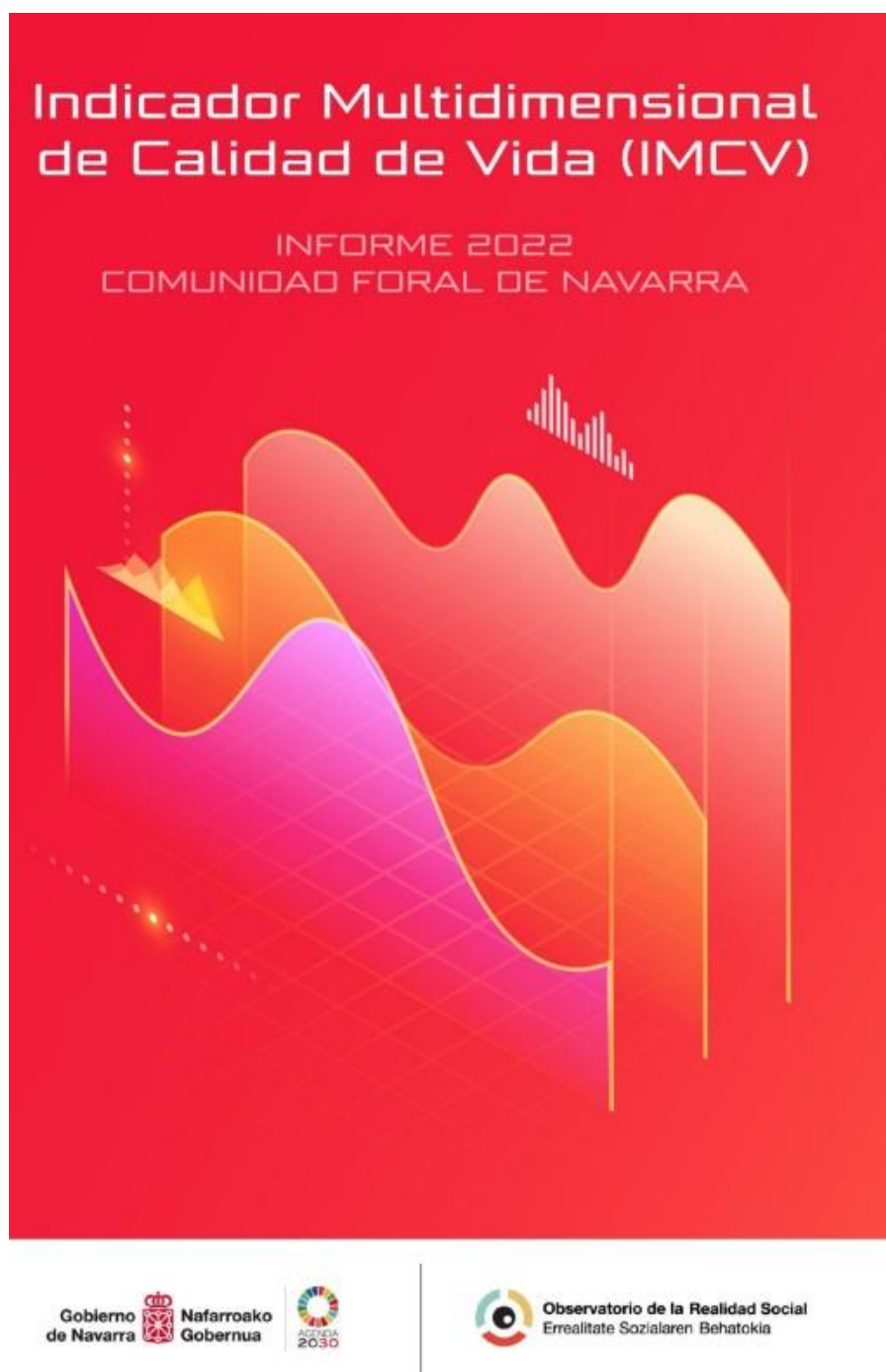
Quality of life in Navarre

Assuming the correlation between host communities' or permanent residents' quality of life and tourism, and its impact on them, Navarre's position in this field should be examined at a national level.

"Since 2008, Navarre has been the region with the best quality of life in Spain"



According to the latest data obtained for 2021 by the Observatory of Social Reality, the Multidimensional Quality of Life Indicator (MQLI) calculates a score of 106 points for Navarre (the highest figure), 4.17 points above the national figure. Navarre holds a cutting-edge position in five categories: Surrounding area and the environment (1st position), Material living conditions (2nd), Work (2nd), Health (2nd) and finally Education (2nd).



Population with a low risk of tourist saturation

Tourist Intensity allows us to study the impact of tourism on the local population, referring to the number of beds, tourists and overnight stays in relation to the local population.

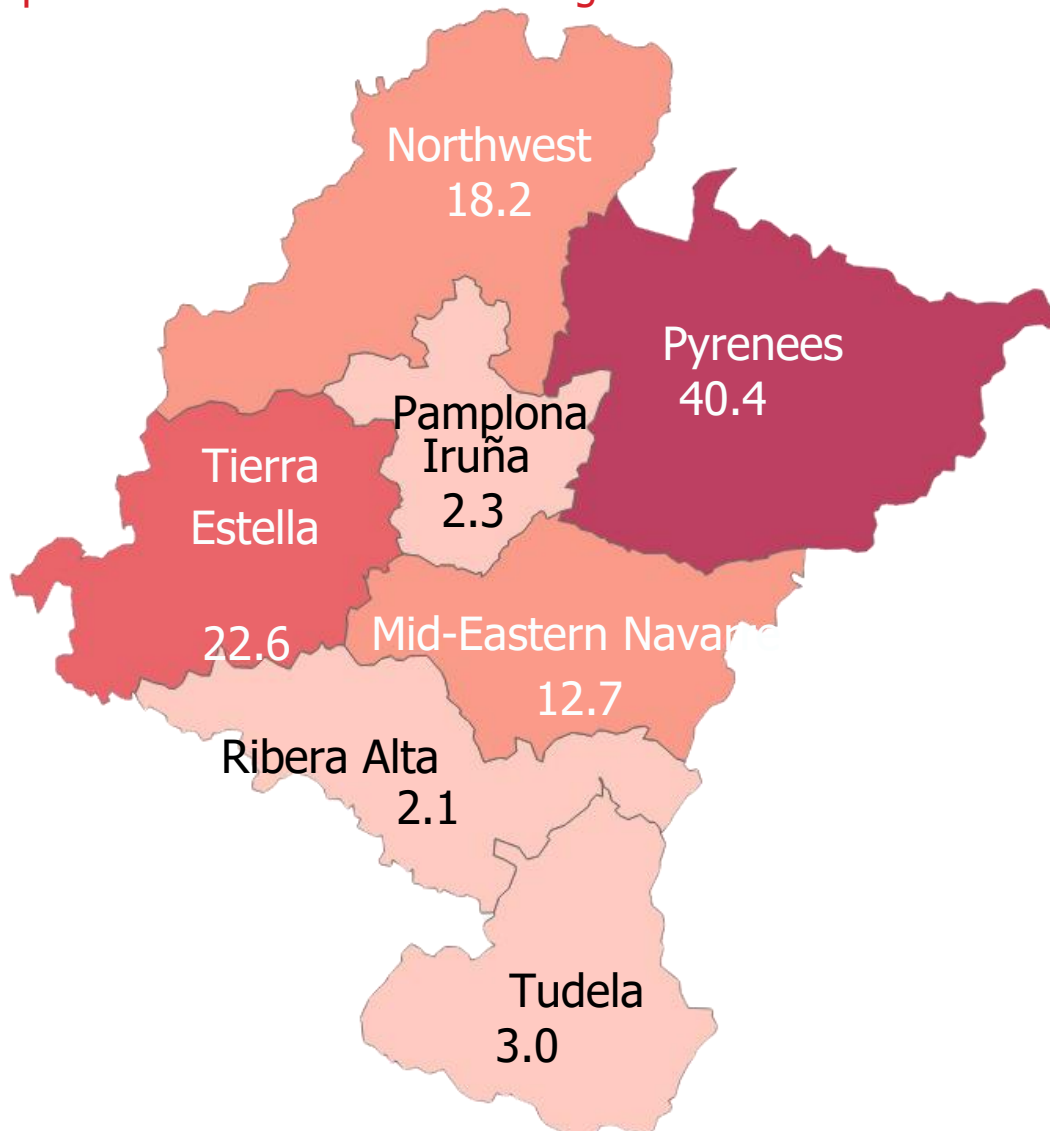
Tourist intensity can have a huge impact on the local population and on the environment. Ways in which tourism can affect local communities include:

- Increase in house prices and rents due to tourist demand.
- Traffic congestion and increased pollution.
- Increase in waste production and pressure on cleaning services.

At the end of 2021, there were a total of 2,101 accommodation establishments in Navarre, offering 41,376 beds, for a local population of 661,537 inhabitants. This works out to be 6.25 beds for every 100 inhabitants, slightly below the 2020 data which was 6.48 beds for each 100 inhabitants. However, if analysis is merely at a provincial level, it is difficult to detect areas with high tourist pressure.

Dropping down to the [Navarra 2000](#) level, the differences are clear. This is particularly noticeable in the **Pyrenees**, as this area has more beds per inhabitant than the rest of Navarra, followed by **Tierra Estella** and the **Northwest**.

Places per 100 local inhabitants using the Navarra 2000 areas



Source: Own work using data from the Electoral Roll and Directory of tourist establishments in Navarra.

In terms of towns and villages, Navarre has a total of 272 municipalities with widely varying populations. Some municipalities have fewer than 100 inhabitants compared to the capital, Pamplona-Iruña with 203,081 inhabitants. This means that rural villages with a campsite have a very high number of tourist beds compared to the local population.

This is the case for the municipality with the highest ratio between tourist beds and local population: Mendaza has a population of 299 and yet has 1,426 tourist beds. This works out to be a ratio of 476 beds per 100 inhabitants. Navarre has other similar towns and villages, with low population and one or two campsites: 16 municipalities with more than 100 beds per 100 inhabitants, followed by 10 in the 50-99 range.

Lekunberri, one of the 2021 UNWTO Best Tourism Villages, has 36.8 beds per 100 inhabitants.

The capital, Pamplona/Iruña, has a total of 2.1 beds per 100 inhabitants. However, this indicator should be viewed in isolation, as 2.1 beds per 100 inhabitants is a figure that does not indicate saturation in the municipality. Nevertheless, using the Residents' survey, we know that in Pamplona's Old Town, 73.4% think that "Tourism increases the tourist accommodation offer and reduces the offer of accommodation for residents" and they are the group who least consider that "Tourism increases the population's quality of life".

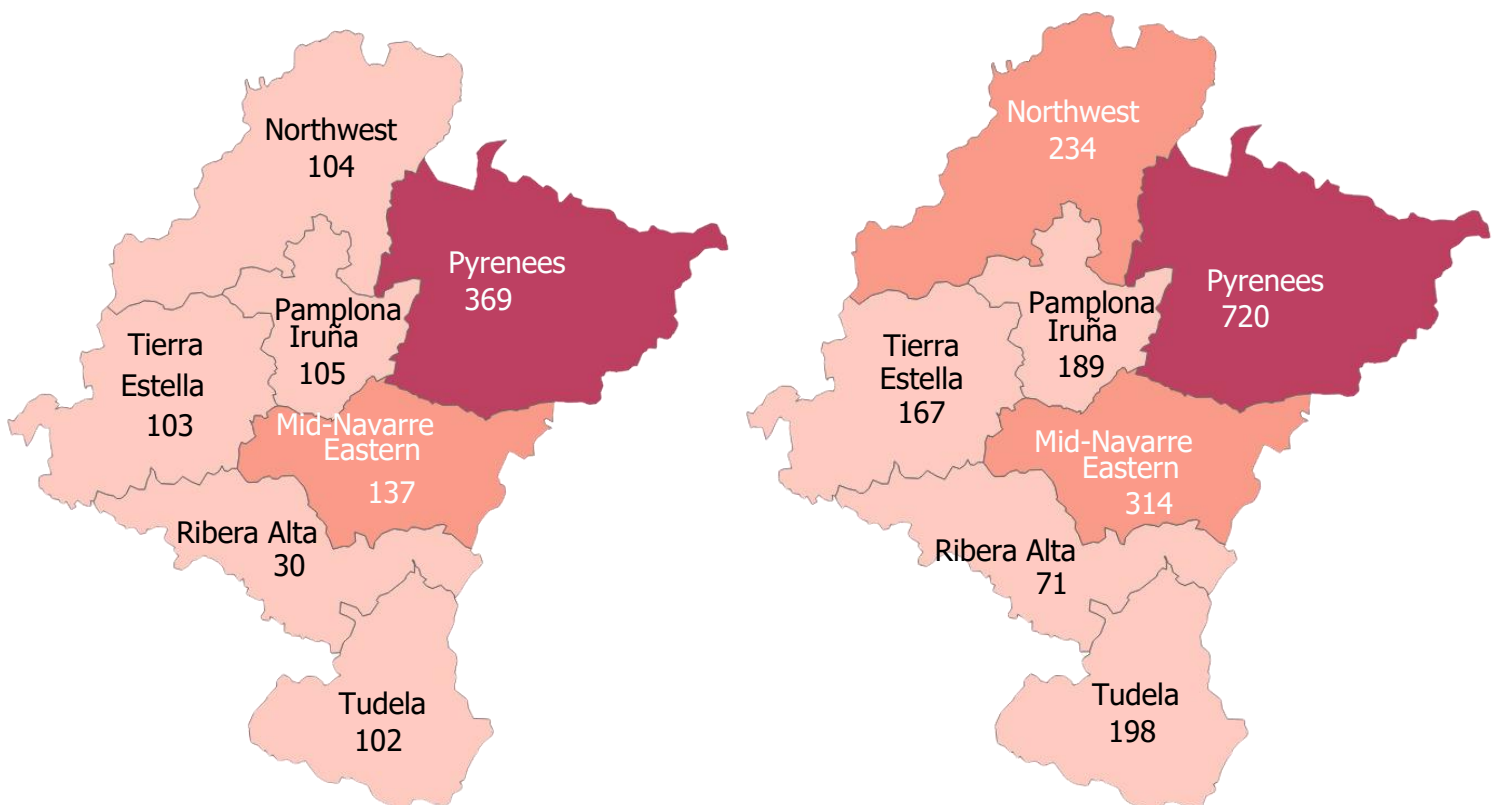
According to the "Essential Characteristics for the Population and Homes" survey, we know that there are more problems of "Annoyances related to tourist activities or hospitality premises" than in the rest of Navarre. Therefore, local satisfaction must clearly be studied from several perspectives.

Hotel accommodation gives us the best view of the local reality for visitors as it provides data for each of the “Navarra 2000” subregions. The remaining types of accommodation do not provide data for all geographic areas of Navarre.

These data give us an idea of the tourist pressure in the different areas of Navarre, although we must bear in mind that this only refers to hotels and no data is available for Apartments, Campsites and country cottages.

The following maps show greater ratios in the Pyrenees than in the rest of Navarre, followed by Mid-Eastern and Northwest Navarre.

Tourists and overnight stays in hotels by Navarra 2000 zones



Source: Own work using data from the Electoral Roll and Hotel Occupation Surveys (INE)

Housing Problems

As mentioned in the previous section, the National Statistics Institute (INE) carried out the Survey of Essential Population and Housing Characteristics in 2021. One of the items in this survey enquires about the main housing problems in the area.

According to this survey, 8% of homes in Navarre suffer from “Disturbances related to tourist activities or hospitality premises” compared to a national level of 9%. Meanwhile, there are fewer delinquency issues in Navarre, standing at 8% compared to 17% nationally.

Within Navarre, there are also certain differences: towns with more than 50,000 inhabitants present figures of 11% compared to 6% in populations under 50,000. This suggests that there are greater problems in the capital, Pamplona-Iruña, as it is the only town with more than 50,000 inhabitants.



ACCESSIBILITY

Although the project to monitor accessibility in tourism in Navarre has only been running a short time (since 2020), the actions in this area are well supported, as mentioned in previous editions.

Since the capital of Navarre, Pamplona-Iruña, won an award in 2013 with Special Merit from European Cities, actions to improve accessibility have intensified exponentially.



Streets in the old town of Pamplona-Iruña are curb- and step-free. Photo: Francis Vaquero

Regulating framework

This was mainly due to the regulating framework brought in and the strategies and plans derived from it. It is thereby fundamental to highlight the Regional Law 12/2018 of 14 June on Universal Accessibility and the Regional Law 1/2019 of 15 January on Cultural Rights in Navarre, which demonstrate the commitment from the Navarrese Public Administration to progressively guarantee physical, mental and sensory accessibility.

Working from the first of these, the Accessibility Operating Plan 2021 was developed, determining the following measures for the Department of Economic and Business Development and, specifically, the General Directorate for Tourism, Trade and Consumption:

- Completing the proposals from the accessibility study on the tourist offices in the Government of Navarre network.
- Review of two tourist infrastructures affiliated with the General Directorate of Tourism, Trade and Consumption which qualify for accessibility improvements, and devising an action plan.
- Information on the website regarding PRM spaces in the vicinity, how to get there on public transport, and bike and car parking facilities and closest taxi rank.
- Fitting a bluetooth marker in the main plate for users with poor sight, magnetic induction loops for information stations and a sign language interpreting service such as Svisual.



In addition, the actions on this matter by the General Directorate of Tourism, Trade and Consumption are driven by the Strategic Tourism Plan 2018-2025 which specifically includes accessibility in objective E2:

“Incorporation of general accessibility criteria for people with special needs.”

This highlights the need to adapt the tourist space to the conditions required by the various collectives by incorporating general universal accessibility criteria. Achieving this requires removing architectural and urban development barriers, encouraging general conditions for non-limiting use and enjoyment.

Actions

Throughout 2021, continuous improvements were made to accessibility in the tourist offices belonging to the General Directorate of Tourism, Trade and Consumption, responding to the needs identified in the 2018 diagnosis to promote universal accessibility.

This took place in the following offices:

- Olite - Erriberri tourist office
- Bertiz tourist office
- Lekunberri tourist office
- Ochagavia - Otsagabia tourist office
- Orrega - Roncesvalles tourist office
- Sangüesa - Zangoza tourist office
- Roncal - Erronkarri tourist office
- Javier - Xabier tourist office
- Estella - Lizarra tourist office
- Tudela - Tuterá tourist office



Adapted Tourist Information Office. Photo: Government of Navarre.

The majority were intended to ease physical accessibility to the offices, both for tourists and for the actual workers. Fitting counters and ramps to ease access to the offices, and even including automatic doors.

Training:

The General Directorate of Tourism, Trade and Consumption determined accessibility as a cross-disciplinary strategy in its Tourism Training Plan 2020-2024. Consequently, while the plan is in force, this aspect of Navarre's tourism sector will be empowered. Starting in 2021, the specific training action "How to create inclusive experiences" was organised and 38 professionals took part (31 women and 7 men), working with apartments or tourist homes (8), campsites (4), country cottages (7), cultural tourism companies (4), active tourism companies (1), hotels (2), hostels (1), travel agencies (1), tourism consortiums (1) and the actual Administration (9). The trainees' satisfaction with the course was very positive, with an overall assessment of 4.5 (out of 5).

Subsidies:

Regarding subsidies, the grants for "Refurbishment, remodelling, improving facilities to improve accessibility for people with reduced mobility or with any other physical, mental or sensory limitation, and removal of architectural and sensory barriers in the tourist establishment" is included in the call to make tourism SMEs more competitive, for companies on the Navarre Tourism Registry.

In the call to promote quality and innovation in communication and promotion of tourism products and services 2021, products which meet the ISO UNE 170001 on Universal Accessibility Certification are included as projects which can be subsidised. However, in the 2019 and 2020 calls, only one subsidy was granted and during 2021, "only €4,571.94 was granted to improve accessibility for a few tourist apartments."

This demonstrates untapped potential. Further steps were also taken in 2021, within the framework of the Royal Decree 1112/2018, of 7 September, on accessibility of websites and applications for mobile devices in the public sector, and the DF 69/2019, of 12 June, which approves the accessibility of websites and applications for mobile devices in the Autonomous Community of Navarre and the Regional Institutional Public Sector, all in accordance with the Directive (EU) 2016/2102 from the European Parliament and the Council. The accessibility declaration was presented, as applied to the Official Navarre Tourism Website www.visitnavarra.es.

Highlighted accessible resources

A section was developed on the Official Tourism Website featuring specific content on the most highlighted accessible resources for persons with auditive, cognitive, physical and visual disabilities. The website also offers a series of tourism companies and tourism agencies with experience in inclusive and accessible activities and guided tours.

Accessible resources registered on InfoReyno:

A section was developed on the Official Tourism Website featuring specific content on the most outstanding accessible resources for persons with auditive, cognitive, physical and visual disabilities. The website also offers a series of tourism companies and tourism agencies with experience in inclusive and accessible activities and guided tours.

What accessibility and type of information are you interested in?

Scroll down this page to get information on accessible **restaurants and activities** in Navarre. Click on the following buttons to access detailed information on **places to visit and accommodation** in Navarre with hearing, cognitive, physical and visual accessibility.



Hearing
accessibility



Cognitive
accessibility



Physical
accessibility



Visual
accessibility

Accesibilidad en Oficinas de Turismo

Most of the **staff have been trained** to meet the needs of persons with different types of disability and almost all the [Tourist Information Offices](#) in the Navarre Government network have **counters that are adapted** to persons with reduced mobility.

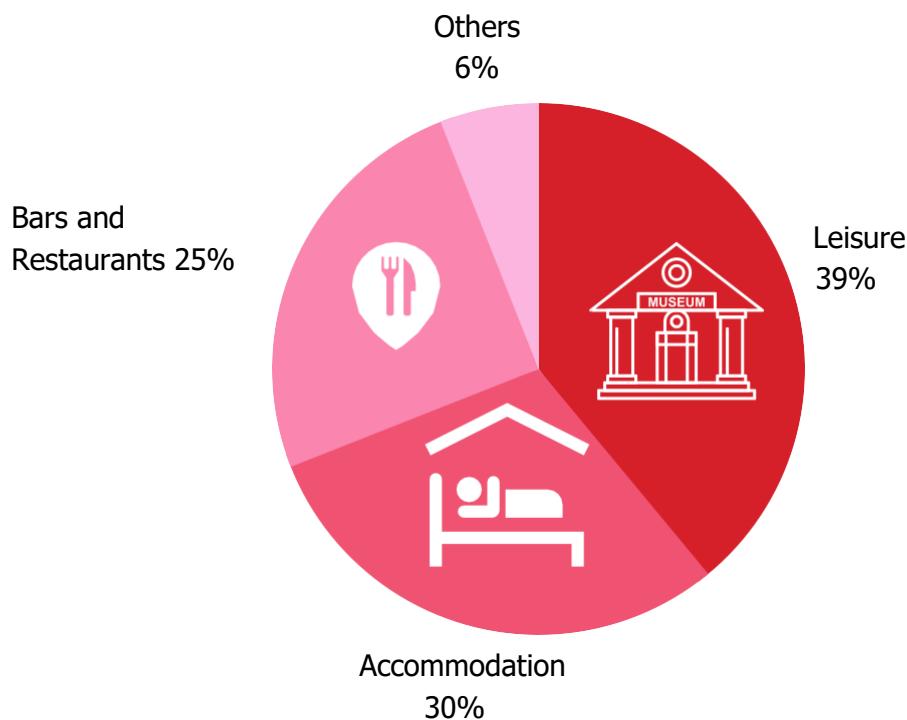
The Tourist Information Office in Pamplona also has an **induction loop** and, on the front of the building, there is a **Navilens marker**.



Tourism resources in the Equalitas Vitae directory

Equalitas Vitae is a consultancy company specialising in accessible tourism that performs diagnoses on tourist resource accessibility. Its directory has registered 129 tourist resources in Navarre, two more than in 2020. On this occasion, they are distributed as follows:

Navarrese tourist companies in the Equalitas Vitae Tourism Companies Directory:



Source: Own work using data from the Equalitas Vitae Accessible Tourism Directory Equalitas Vitae https://www.equalitasvitae.com/es/guia/guia_ccaa.php?id=15

The tourist resources compiled in the Equalitas Vitae register include several of the most visited tourist resources in 2021, such as the Castle of Javier, the Olite Royal Palace and Pamplona Cathedral. However, **53%** of them are **unverified**, and **43%** **verified**.



ENERGY MANAGEMENT

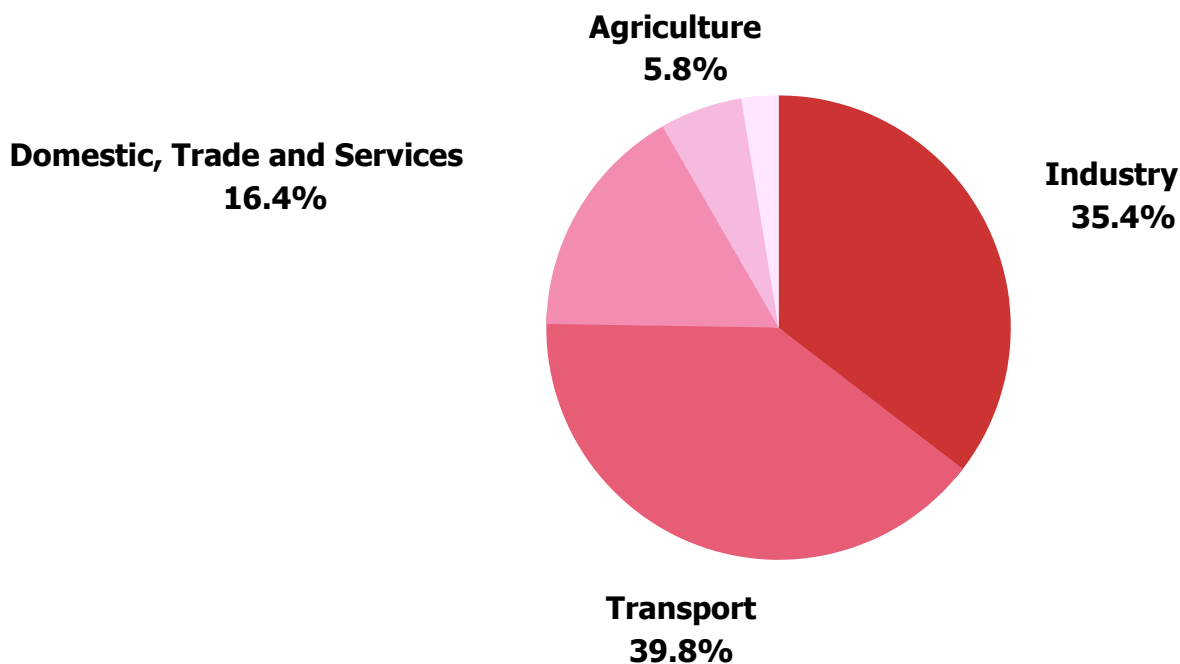
Energy consumption in Navarre

This chapter presented data from the 2021 Navarre Energy Report, approximating the proportion which can be attributed to tourism. In Navarre's energy report, direct consumption of energy from the tourist sector is reflected in the "Domestic, trade and services" consumption.

According to the 2021 energy report, this concept consumed 335,360 TOE (tonne of oil equivalent) which represents 16.4% of the 2,043,829 TOE consumed in Navarre during 2021.

The domestic, trade and services sector has been declining steadily, by 3.29%, over the last decade, while consumption increased by 9.24% between 2020 and 2021.

The transport sector grew the most over the previous year, +34.17%, mainly due to a figure that was way below normal in 2020. Regarding changes over the last 10 years, transport has increased 7.28%.



Source: Own work using data from the Navarre Energy Report 2021

Transport relating to tourism

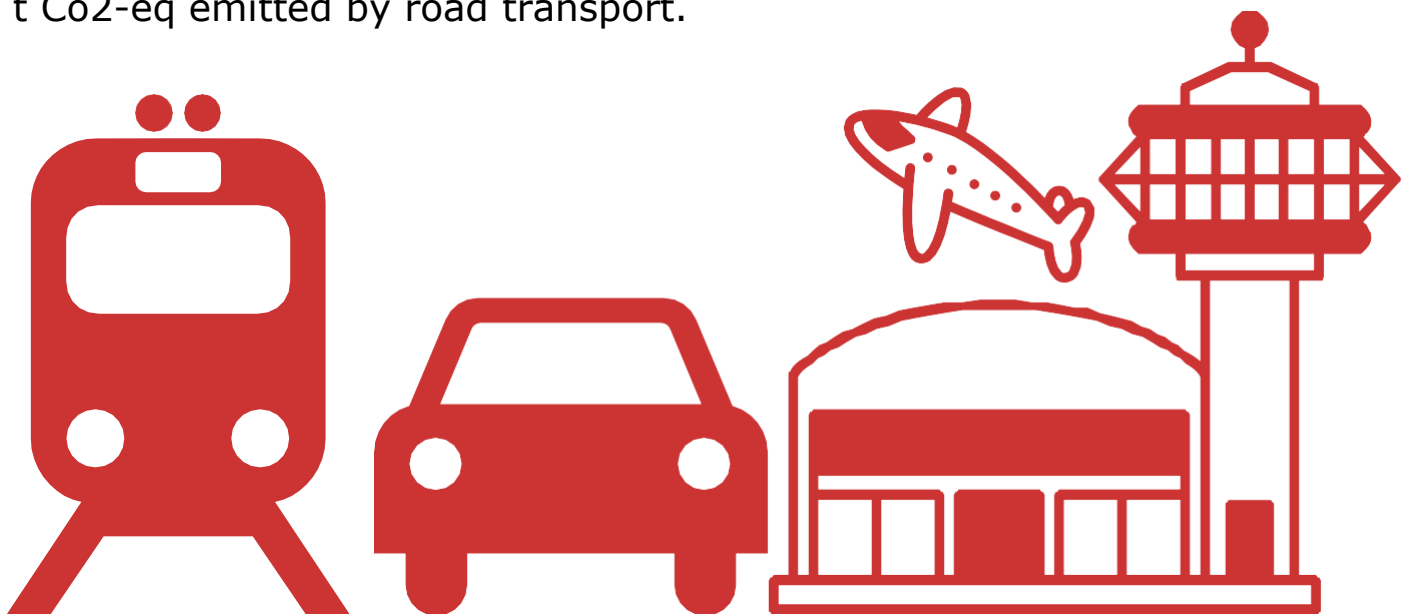
As revealed by the tourism satellite account 2010-2014, tourism also affects the other sectors throughout its value chain. It is important to bear this in mind as we lack specific energy consumption data for the tourist sector. Supposing that the proportion of the consumption in monetary terms is equal to the corresponding energy consumption, we can get an idea of the proportion of energy consumed by transport.

- o Ground transport of passengers (train and other transport): 22%
- o Air transport of passengers: 86%

This would mean that 86% of the energy consumption for air traffic and 22% of ground transport could be attributed to tourism.

With the 2020 data from the GHG Emissions Inventory from the Government of Navarre, we can estimate the consequent proportion of emissions which might be attributed to tourism.

In 2020, air traffic emitted 8,266 tonnes of Co₂-eq of which 86% or 7,108.8 t Co₂-eq would be from tourism. In the case of road transport, tourism would be responsible for 219,187 t Co₂-eq of the total 996,306 t Co₂-eq emitted by road transport.



Indicators for the state of renewable energy in Navarre:

On the path from energy sustainability to sovereignty, renewable energy (RE) is essential.

Navarre thereby monitors a series of indicators on the proportion of renewable energy generated and consumed in Navarre.

RE share in the final gross consumption of energy:

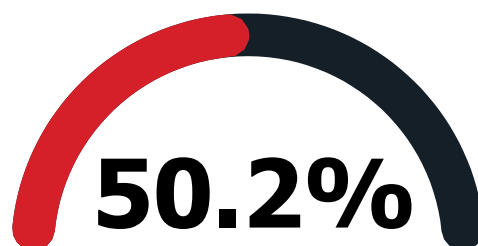
According to the Navarre Energy Report 2021, 25.13% of final consumption came from renewable sources. This demonstrates growth of +5.6% compared to 2020 and +19.5% over the last 10 years.



RE percentage of electricity production:

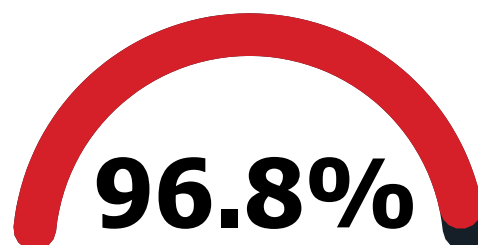
Electrical energy from renewable sources is once again over 50%. In 2019 and 2020, this percentage was slightly under half.

According to the Navarre Energy Report 2021, this figure now is back over 50%.



Electricity production using RE / Electricity consumption:

The ratio between electricity production using RE and the total electricity consumption is an objective indicator for the European Union. By 2030, this indicator should reach 70%. As shown in the table, Navarre meets this figure easily.

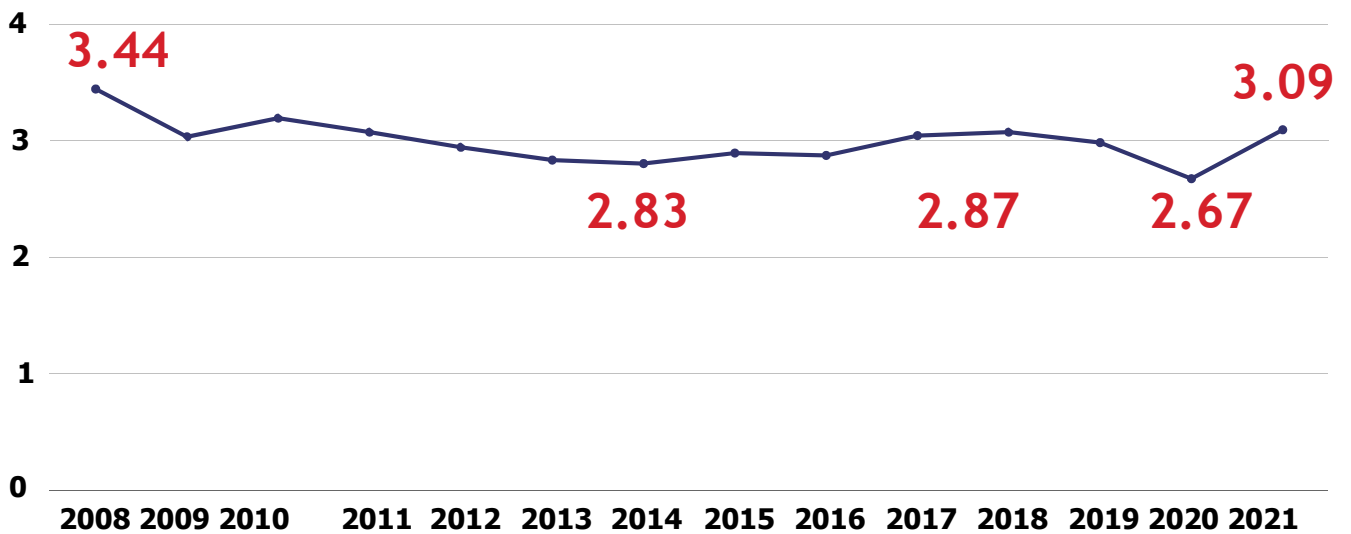


Source: Own work using data from the Navarre Energy Report 2021.

Consumption per capita:

The energy consumption per capita is a basic indicator to determine energy consumption trends over time. In Navarre, the consumption per inhabitant is calculated in the TOE unit (tonne of oil equivalent) equivalent to 11,630 kWh.

Energy consumption per capita in TOE:



Source: Own work using data from the Navarre Energy Reports 2011- 21

The figure for 2021 is 3.09 TOE per inhabitant. This is +15.7% more than the pandemic year of 2020, and +0.66% more than in 2011. The timeline demonstrates that energy consumption per capita in Navarre has been stable for the last decade.



WATER MANAGEMENT

This section uses data from other Navarrese public institutions. The Regional Government Department of Rural Development and the Environment runs periodic tests on natural bathing areas and rivers. Regarding water consumption, we rely on the system of strategic climate change indicators for Navarre within the KliNA Navarre climate change roadmap, plus data from local authorities that manage supply.

This monitoring area is becoming increasingly important due to climate change that is causing periods of drought and also the potential for more extreme rainfall. This problem only exacerbates the need for sustainable water resource management in our community.

According to the system of strategic indicators on climate change in Navarre, the total consumption per inhabitant per day in Navarre was **315.7 litres a day in 2021**. This represents consumption of approximately **73,810,000 m³** per year. The consumption per inhabitant data varies considerably between local water authorities.



Indicator 31. Total water consumption per inhabitant

Drinking water production was **-1.77%** less than in 2019

Pamplona-Iruña water authority

The largest water authority is the District of Pamplona which supplies water to Pamplona and its surrounding area, a population which is equivalent to 57% of the inhabitants of Navarre. In its annual report, it states that water production in 2021 was 29,815,753 m³, 0.05% more than in 2020 and 0.64% less than average over the last 5 years. On the positive side, it highlights that the level of unregistered water dropped from 11.7% in 2020 to 10.1% in 2021. The actual water authority credits this drop to its policy to search for and repair continuous leaks, and the use of new technologies to detect leaks.



2021 Report
Pamplona District Water Authority
Iruñerriko Mankomunitatea



Mancomunidad
Comarca de Pamplona
Iruñerriko
Mankomunitatea

Estimation of water consumption:

In an attempt to provide the most complete image of water consumption possible, we made two estimations of water consumed by tourists staying in Navarre.

Firstly, we calculated equivalent consumption, which basically applies the local population's consumption to the tourist population.

During 2021, there were 2,767,899 overnight stays, so we multiply this figure by the daily consumption of 315.735 litres and we get an annual consumption per tourist population of 873,923 m³.

On the other hand, we also estimate water consumed in tourist accommodation. To do so, we compiled benchmark consumption per types of accommodation, and we multiplied it by the overnight stays.

For our benchmark, we use the consumption provided by the “Best environmental management practice in the tourism sector”, published by the European Commission in 2013.

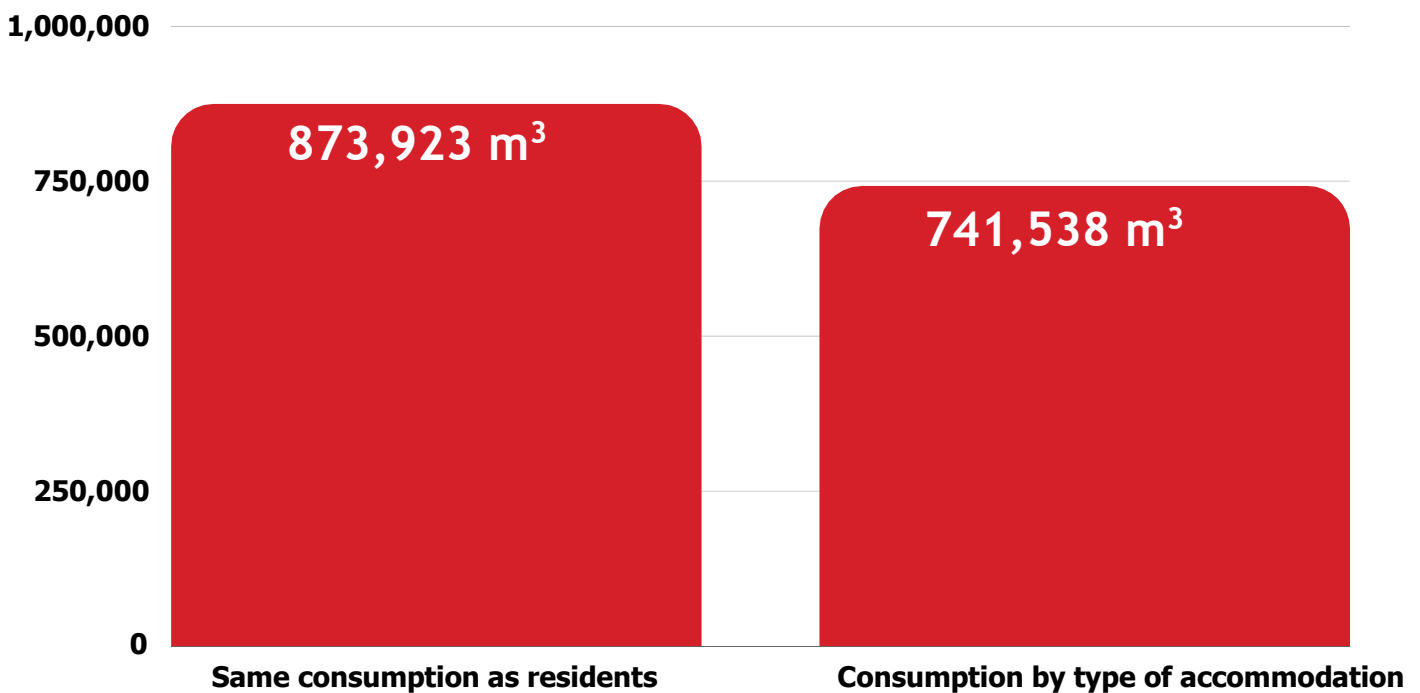
| Tipo de Alojamiento | Consumo de agua (litros/pernoctacion) |
|---------------------|---------------------------------------|
| Hotel | 312 |
| Casa Rural | 273 |
| Bed and breakfast | 226 |
| Camping | 226 |
| Group accomodation | 115 |

Source: David, S., Harald, S., & Luis, G.M. (2013). Best Environmental Management Practice in the Tourism Sector.

These data have strengths and weaknesses. Strengths: they come from a rigorous scientific study and provide consumption data for each of the five types of accommodation for which we have official data. Weaknesses: they come from a study performed in Germany and Austria, published for the first time in 2006.

This estimation calculates a consumption of 732,550 cubic metres of water.

So, according to the two methodologies, consumption by the tourist sector in Navarre would fall between 741,538 m³ and 873,923 m³, respectively 1.01% and 1.18% of the annual water consumption in the Autonomous Community of Navarre.

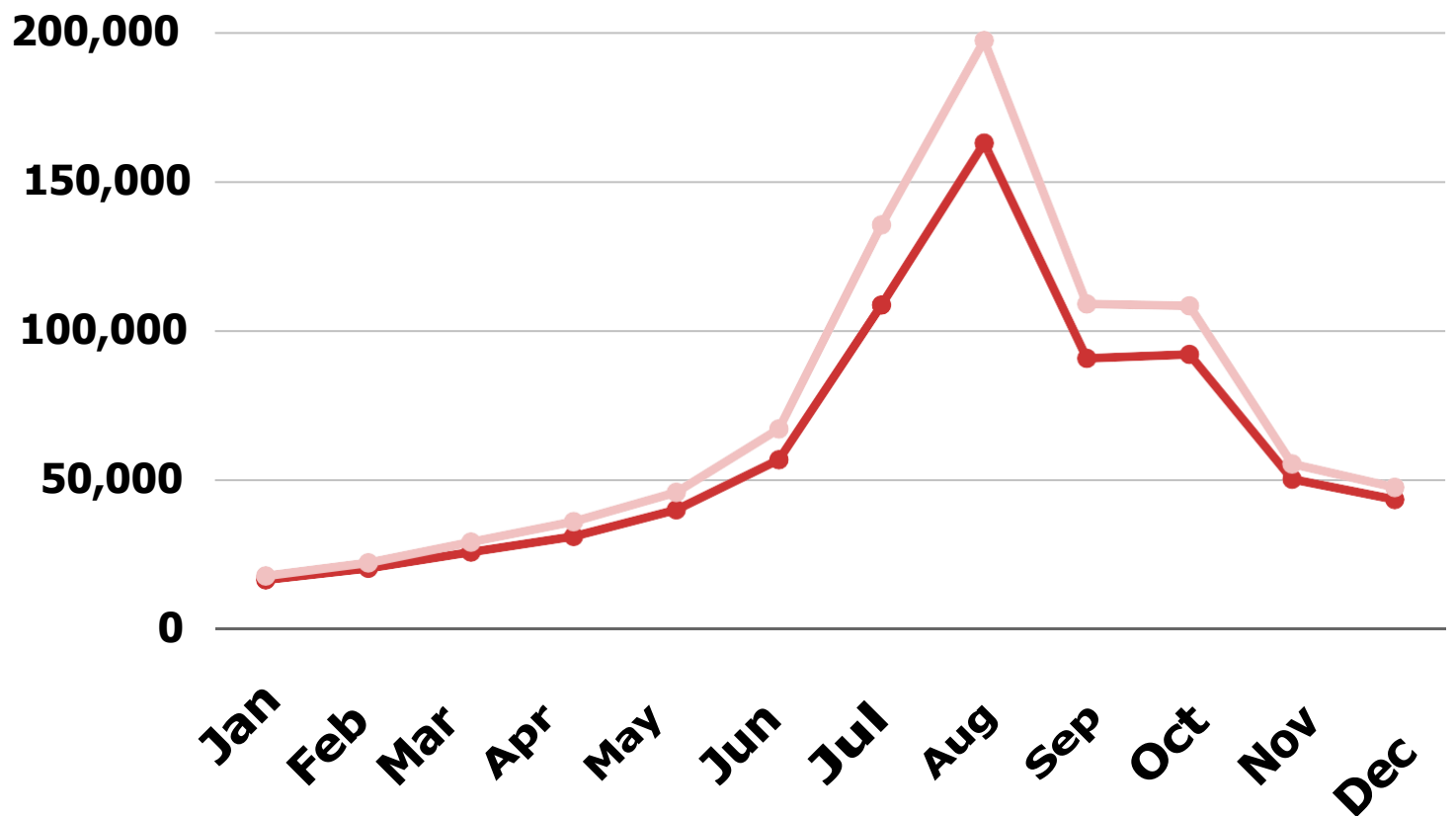


Source: Own work using estimations

The distribution over the year is more important than the total quantity and proportion of the water as considerable differences can be seen in estimated consumption.

The average uses 72,827 and 61,795 m³ a month respectively. However, due to the seasonality of tourism, consumption varies from 18,199 m³ in January to 197,195 m³ in August. This is highly relevant because the highest consumption coincides with months when water is most scarce.

■ Type of accommodation ■ Equivalent consumption



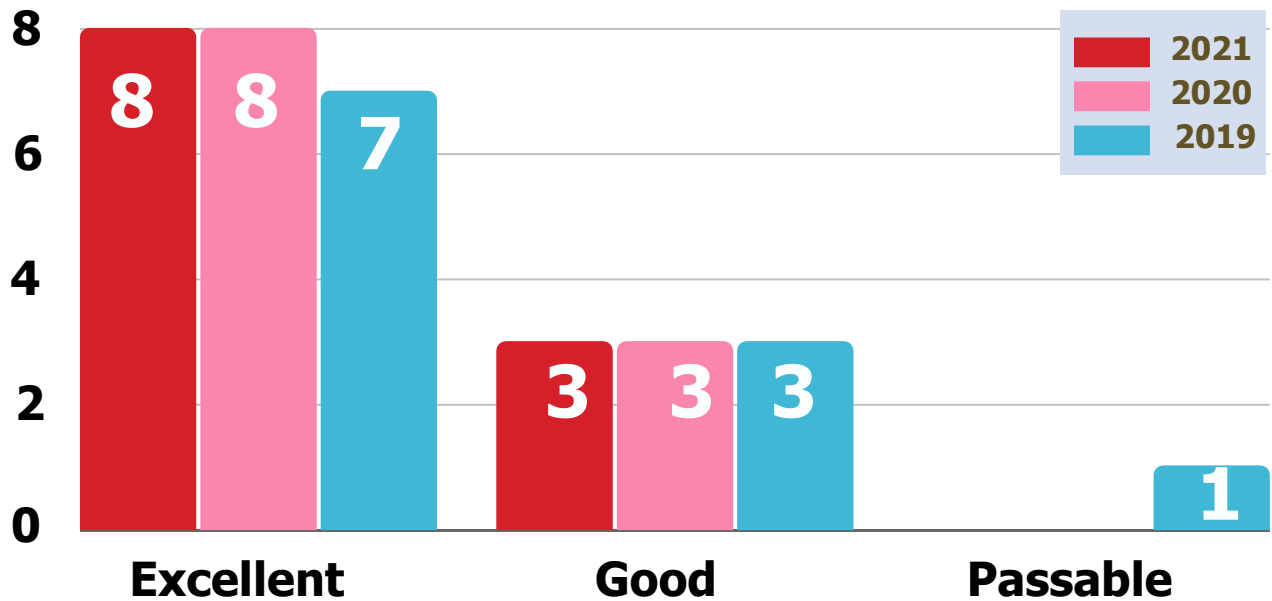
Source: Own work using estimations

In conclusion, both estimations are approximations based on consumption averages, one from the population of Navarre, although not specifically for tourism, and another which is specific to tourism but not necessarily Navarre. Consequently, there is room to improve the estimation. Even considering its weaknesses, this type of calculation reveals the effects of seasonality, plus the fact that the months with the highest consumption coincide with the lowest availability of supply.

73% of bathing water has an excellent quality level

Bathing water

The Government of Navarre Department of Rural Development and the Environment and the Institute of Public and Occupational Health monitor water quality in swimming areas. The quality of this water is important for health, the environment and tourists' perception of Navarre.



Source: 2021 Report: Verification network for natural bathing areas in Navarre

Out of the 11 bathing areas monitored in Navarre, the water in 73% has excellent quality, the same as in 2021.



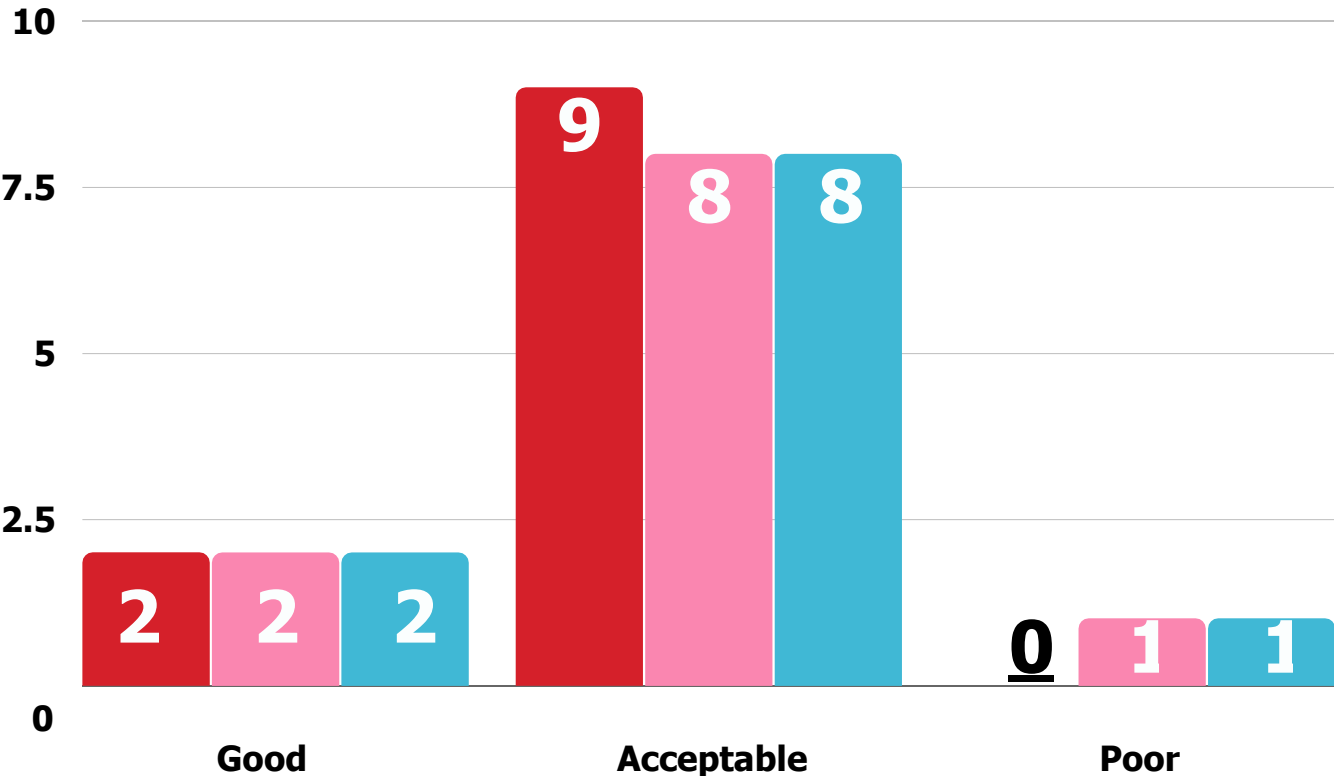
2021 Report Verification network for natural bathing areas in Navarre

Nafarroako Gobernua  Gobierno de Navarra

Nafarroako Ingurumen Kudeaketa, S.A.  Gestión Ambiental de Navarra, S.A.

Regarding the hygiene-sanitation situation in and around the bathing areas, this is classified according to the general hygiene-sanitation condition and the existence of appropriate infrastructures. It is considered “Good” when not only are good hygiene-sanitation conditions maintained but there are also appropriate infrastructures and services. “Acceptable” is given when the hygiene-sanitation conditions are good, but there is no appropriate infrastructure. Finally, the environment is classified as “Poor” when hygiene-sanitation conditions are inappropriate.

Hygiene-sanitation situation of the area



Source: Source: 2021 Report: Verification network for natural bathing areas in Navarre

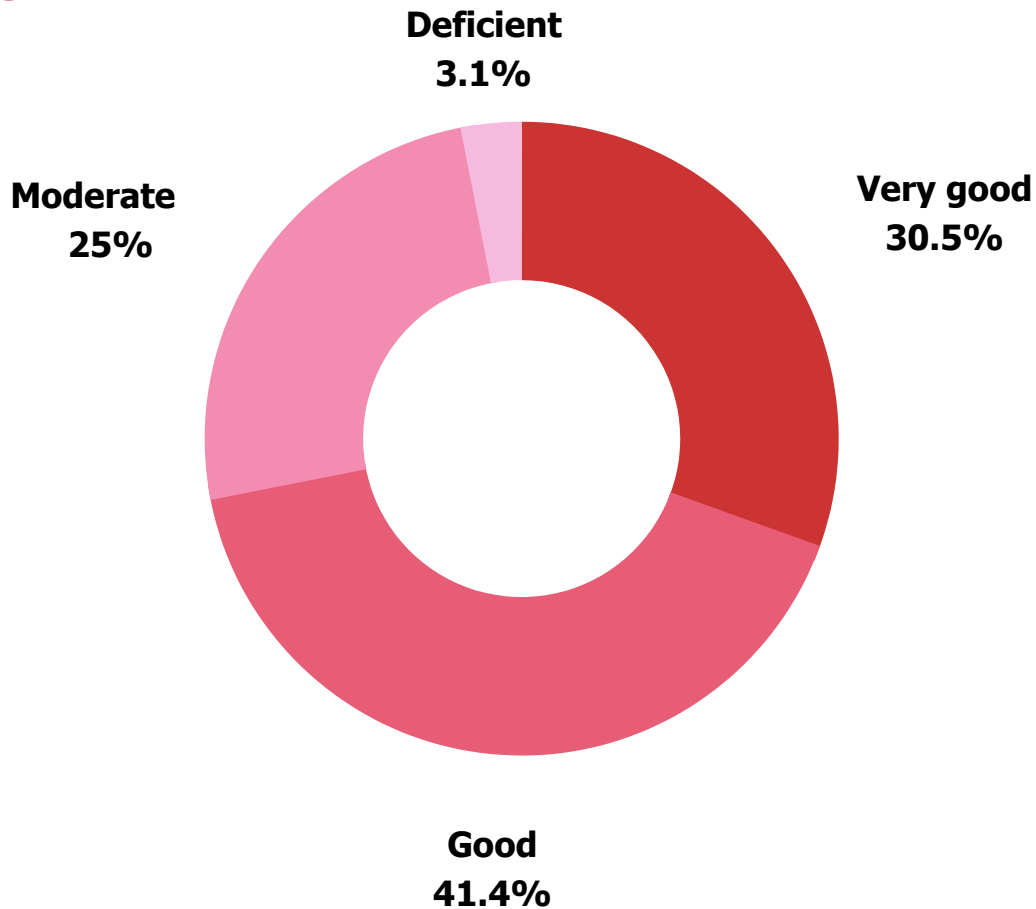
In 2021, for the first time, no bathing area has a poor hygiene-sanitation situation. This is due to good water quality. Furthermore, the reason why most of them are only acceptable is because they lack infrastructures, despite good water quality.

Condition of the rivers in Navarre

The Department of Rural Development and the Environment monitors water quality in Navarrese rivers, considering both the physical-chemical and ecological condition.

Regarding its **ecological condition**, 30.5% of the checkpoints present **very good conditions** followed by 41.4% in **good condition**.

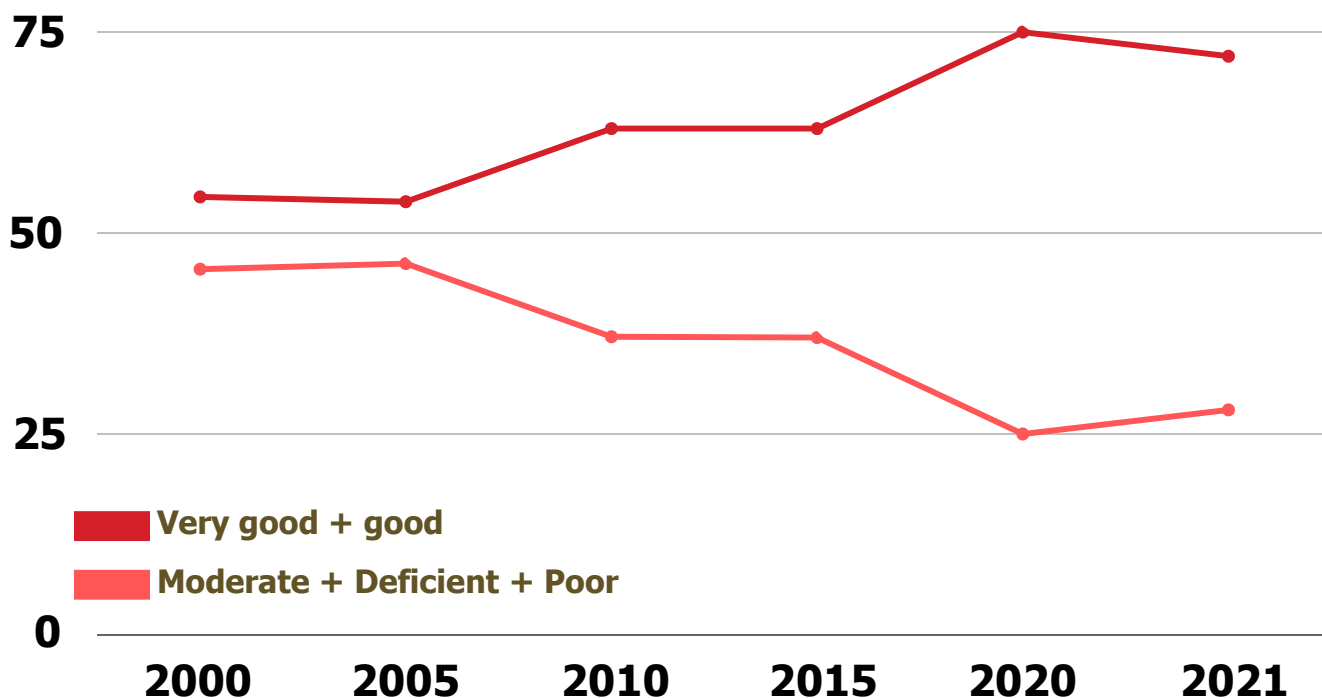
Ecological condition of the rivers in Navarre



Source: Own work using data from the Department of Rural Department and the Environment

Finally, it should be highlighted that the general condition of the rivers in Navarre has improved over the last decade. As shown in the graph below, the number of “Very good” and “Good” quantity scores has gradually improved since 2000.

Evolution in the ecological condition of rivers in Navarre



Source: Own work using data from the Department of Rural Development and the Environment



2021 Report Ecological condition of surface water masses

Nafarroako  Gobierno
Gobernua de Navarra

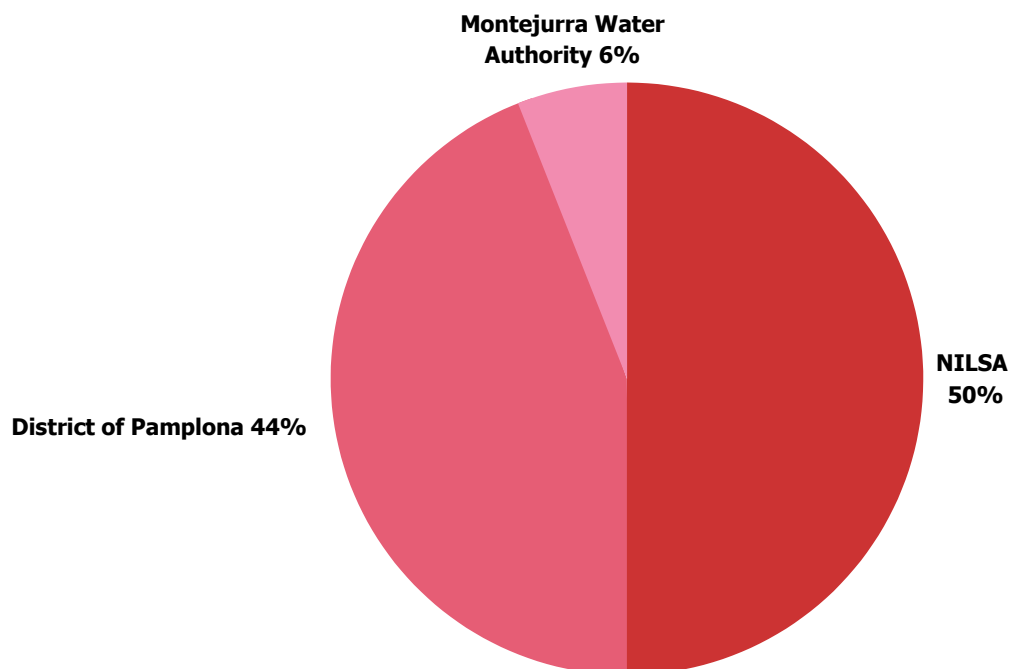
Nafarroako  Gestión
Ingurumen Ambiental de
Kudeaketa, S.A. Navarra, S.A.



WASTEWATER MANAGEMENT

Navarre has an extensive network of water treatment facilities. In Navarre, a public company, NILSA S.A (Navarra de Infraestructuras Locales, S.A.), manages 50% of wastewater treatment.

The other 50% corresponds to two major water authorities in the province: on the one hand the Pamplona District Water Authority, which treated 35,645,535 cubic metres of wastewater, serving 364,598 inhabitants; on the other hand, the Montejurra Water Authority's facilities treated 4,909,250 cubic metres, serving a population of 40,123 persons.



Source: Own work using the 2021 Annual Report from NILSA

99.88% of the population has appropriate water treatment

The Government of Navarre aims to serve 100% of the population of Navarre. In 2020, this figure was 99.8%, rising in 2021 to 99.88% of the population covered by at least one treatment step.

After the treatment process, the wastewater is released into the two main river systems in Navarre. NILSA monitors the quality of the water released into the rivers, and publishes reports every quarter featuring performance indicators, such as Suspended Solids, DQP, DBO and N-NH₃ for each of the Wastewater Treatment Plants (WWTP).

The wastewater in Navarre passes through one, two or three steps in the treatment process. Currently, 91.8% of the population is covered by two-step treatment. While 5.8% is covered by three-step treatment and only 2.3% by one-step treatment.

As mentioned in the Water Management chapter, the condition of the rivers is also monitored. This monitoring shows that the general condition of the rivers is good, showing significant improvement over the last two decades. However, it also reveals some high values of ammonia and nitrates downstream from some of the main WWTPs. Therefore, the physical-chemical quality in these areas is only classified as “good” and not “very good”.



2021 Report
NILSA. S.A.





SOLID WASTE MANAGEMENT

The Autonomous Community of Navarre produced a total of **284,106 tonnes of domestic and commercial waste in 2021**. The waste generated directly by the tourism sector is included in this category. The figure is higher than the previous year, showing an increase of 0.7%. Compared to 2010, the total amount has risen by 1.2%.

Regarding waste generation per inhabitant, the figure is also similar to the previous year with **429 kilograms per inhabitant per year**.

The Navarrese waste law sets reduction targets: **384 kg per inhabitant by 2025 and 375 kg per inhabitant by 2030**.

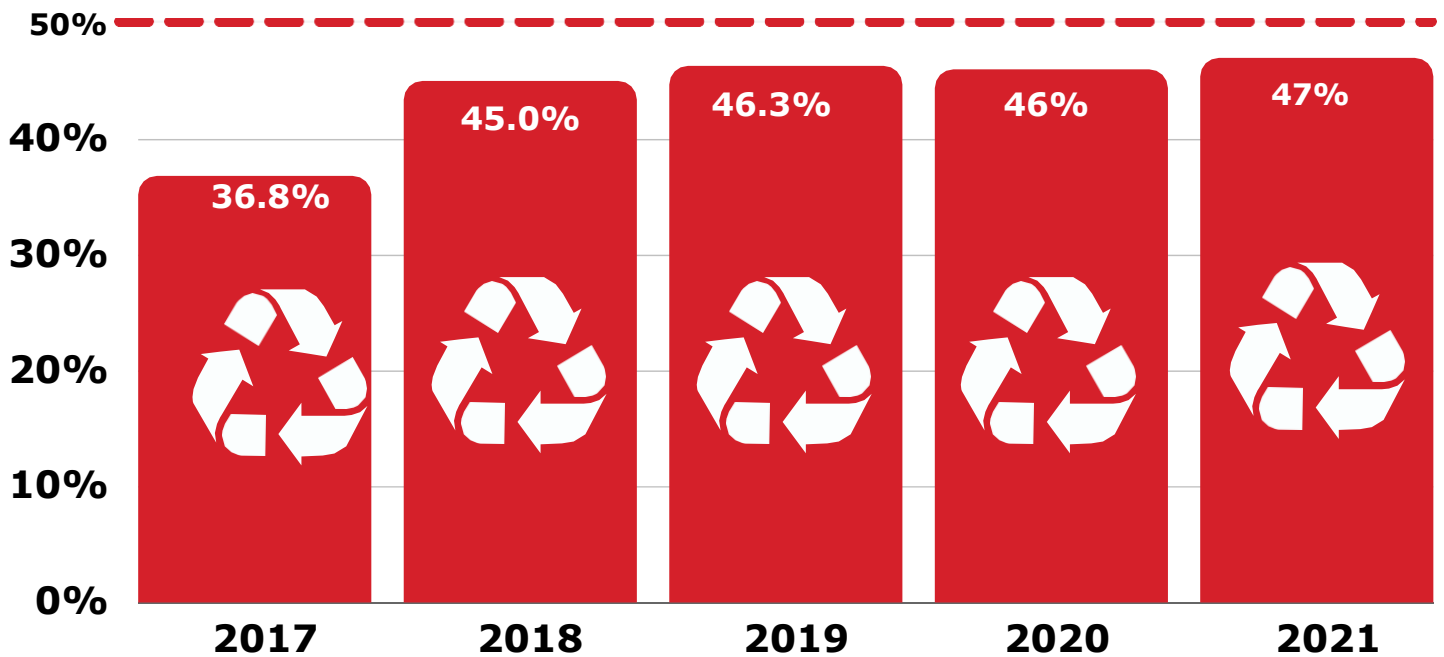
Regarding recycling waste, Navarre set a target to recycle or reuse 50% of domestic and commercial waste. **This target has not been met yet as the percentage in 2020 reached 46% and 47% in 2021**.

Although **14 out of 16 local waste management entities meet the objective**, it should be mentioned that it is the most populated towns in the Ribera and Pamplona/Iruña that fall short. The goals for the future are 55% in 2025, 60% in 2030 and 65% in 2035.

In 2021, Navarre recycled 47% of its domestic-commercial waste

The actual Monitoring Report for the Navarre Waste Plan 2017-2027 concludes that: "In terms of waste generation in 2021, the scenario has worsened compared to 2014, with a sharp increase in practically all waste flows. This trend should be reversed in all flows, to be able to reach the goal of a 13% reduction in waste generation in 2010."

Percentage variations in recycled waste: 2020 Objective



Source: Own work using data from the Department of Rural Development and the Environment



2021 SITUATION REPORT GENERATION SCENARIO AND MANAGEMENT TO 2027



MONTH-BY-MONTH EQUIVALENT GENERATION

This calculation is based on the average waste generated by the population of Navarre.

Waste generation.

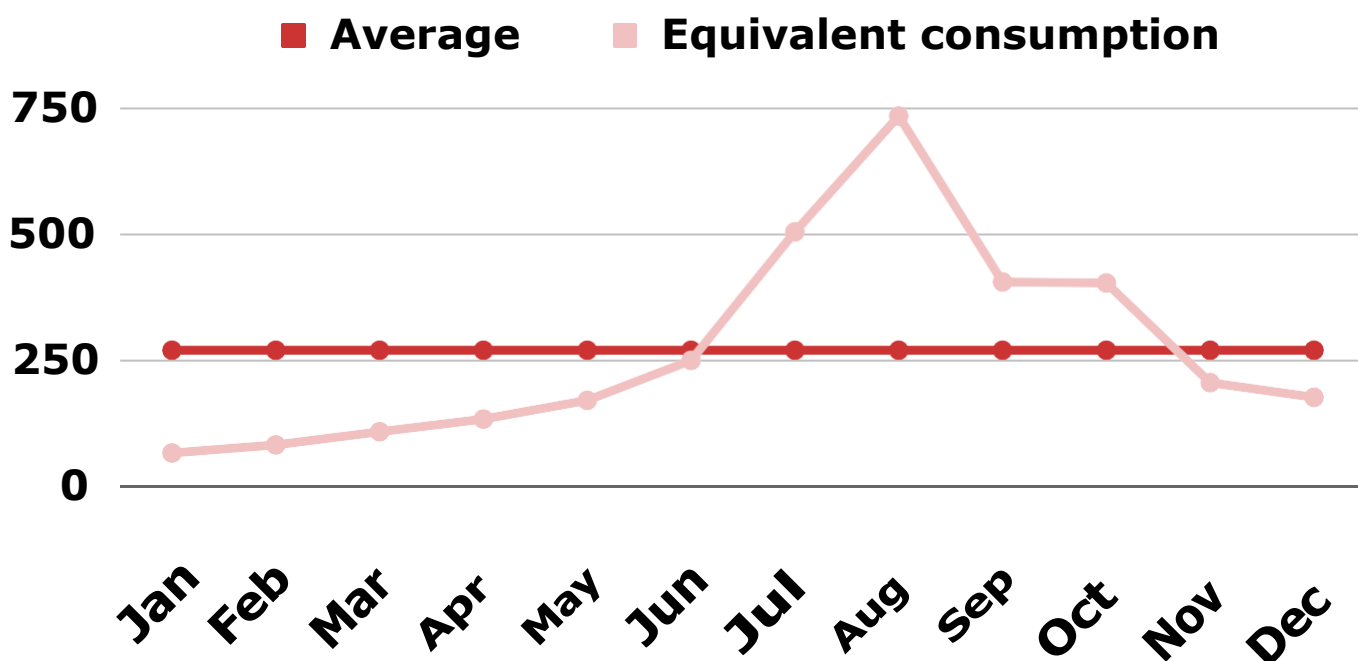
When managing waste produced by the tourism sector, the seasonality factor is essential to process it properly.

For this reason, we calculated the waste generated by the tourist population per month. Although the waste generation data we applied refers to the general population, this gives us an idea of when the tourism sector produces the most waste.

As mentioned above, a total of 284,106 tonnes of waste was produced during 2021 in Navarre, equivalent to 429 kg per inhabitant per year, or 1.18 kg per day.

If we apply this 1.18 kg a day to the tourist population, we calculate that 3,253 tonnes of solid waste generation can be attributed to tourism, 1.2% of the total in Navarre.

As in the case of water, tourism seasonality means that waste which can be attributed to tourism varies between 68 tonnes in January to 734 in August.



Source: Own work using estimations

DOOR-TO-DOOR GLASS COLLECTION DATA

As specific data on waste generation by the tourism sector is scarce, we have searched for possible sources.

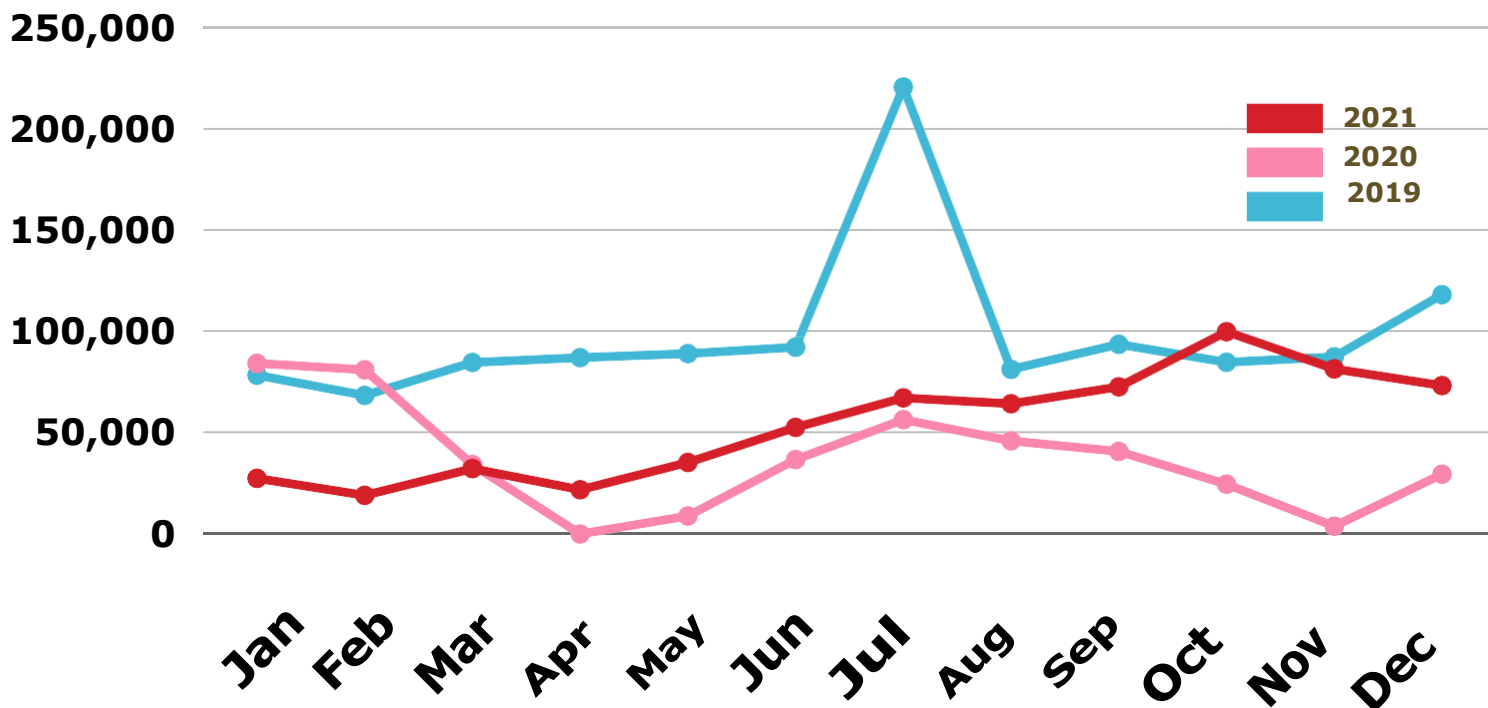
In the capital, Pamplona, glass is collected door-to-door from bars and restaurants in the Old Town. These data have a series of limitations.

1. Hospitality not only serves tourism but also the local population.
2. This collection only considers glass and no other type of waste.
3. It is a very limited geographic area.

However, it is the only data available on waste produced directly by hospitality, on a month-by-month basis.

The data reveal a slight upturn in the period from 2015 to 2019, until the coronavirus pandemic began in 2020. Every year up to 2019, the month with the highest collection was July, coinciding with the San Fermin festival. This month usually represents 18-19% of the glass collected during the year.

Variations in glass collection by month:



Source: Own work using data from the District of Pamplona local authority.

RECYCLABLE WAY OF ST JAMES

The Way of St James runs through a series of small villages along the route which crosses Navarre. In these villages, the pilgrims, and the hospitality industry that lives off them, generate a considerable proportion of the waste.

For this reason, a project was set up in 2020 to improve recycling in hospitality.

In parallel, "The Way to Recycling" project was also set in motion. This project aims to raise awareness among pilgrims and provide the necessary tools to ensure that nature along the Way does not become a littering ground.

This project has already been picked up by 34 hostels in Navarre with a total of 1570 places. According to the project's initial data, the "eco-pilgrims" taking part put 13 tonnes of packaging or papers in the corresponding bins between June and September 2021.

Navarre is taking part in this project alongside Galicia, Castilla y Leon, Asturias, La Rioja, Cantabria and the Basque Country.





CLIMATE ACTION

As defined in the sustainable development goals, “Climate Action” aims to fight climate change and help adapt its effects. Consequently, this chapter will attempt to present the state of mitigation and adaptation to climate change from the legislation and planning perspective and also actions and empirical data.



The challenges for Sustainable Development Goal 13 include bringing climate change-related measures into policies, strategies and national plans.

LEGISLATION AND PLANNING

As mentioned in the 2020 report, the Government of Navarre has been drafting a Climate Change Law and the Regional Bill on Climate Change and Energy Transition was approved by Government agreement on 1 September 2021.

This law contains a specific article concerning tourism. Article 70 of the law stipulates the following:

“The Government of Navarre and the local entities, in their respective jurisdictions, in relation to the policies and actions that are developed in the tourism sector, will work towards a more sustainable model, which consumes fewer resources and takes better care of the territory, making it less vulnerable to the effects of climate change, incorporating, among others:

- *Inclusion of sustainability criteria in the tourism promotion strategy. Assessment of risks derived from climate change for the sector.*
- *Awareness-raising and information for personnel working in the tourism sector and tourists on the impact of climate change and*
- *sustainable use of resources.*

Encouraging environmental certificates for tourism activities and establishments.”

Navarre Strategic Tourism Plan 2018-2025

If we take a closer look at the Navarre Strategic Tourism Plan 2018-2025, it acknowledges the environmental impact of tourism, particularly the GHG emissions generated by transport, and it highlights measures to try to reduce emissions in air transport journeys.

Specifically, the plan considers measures such as:

- Boosting compensation from the Regional Government for emissions generated by air transport of tourists from issuing markets.
- Adapting ground transport resources to use cleaner technologies.
- Adapting establishments to the best metabolic integration technologies: water cycle, energy efficiency, and connected self-sufficiency, selective waste management.
- Prioritising short channel suppliers to reduce transport emissions and eco-suppliers.
- Boosting green marketing strategies and CSR. Actions within the framework of this measure should be aligned and coordinated with Navarre's S3 proposals on renewable energies and other sustainability innovations.

S4 Strategy:

As reflected in the governance section, the Government of Navarre's S4 Regional economic transformation strategy includes prioritising sustainable tourism. Its first three lines of work are directly related to climate action:

1. Green transition through sustainable movement: cycle-tourism, greenways and non-motorised itineraries.
2. Green transition in sustainable management of tourist spaces. Regulation of access points and flows of visitors.
3. Driving energy efficiency in the Navarrese tourism system: energy improvement actions in establishments and energy certificates.



MONITORING:

One consequence of climate change is a more extreme climate, causing periods of both drought and intense precipitation.

The Government of Navarre project LIFE NAdapta was presented in December 2017. The aim of this project is to adapt Navarre to the effects of Climate Change, specifying 53 measures to develop in six strategic areas: water, forests, farming, health, infrastructures and planning and monitoring. The project manages a series of adaptation actions and a system of indicators relating to climate change.

The system has four goals:

1. Characterising hazards (climatic variables).
2. Characterising exposure and vulnerability.
3. Monitoring associated impacts.
4. Applying adaptation measures.

The general indicators for Navarre as a destination, shown below, briefly present some of the most relevant indicators for tourism.

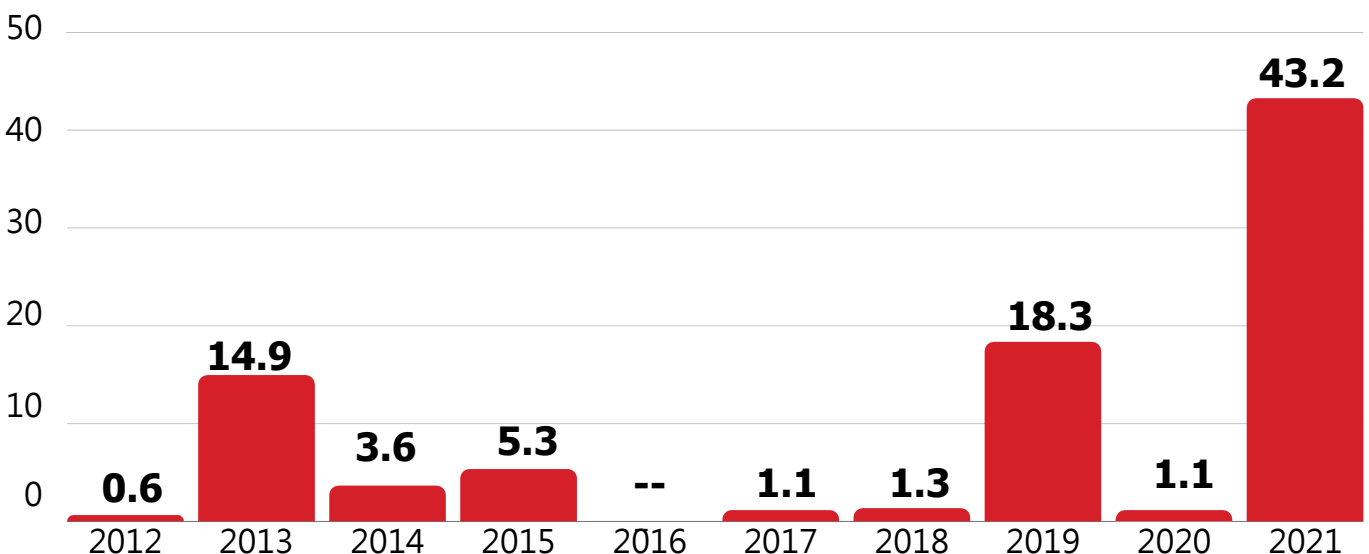


Precipitation, flooding and drought

Regarding the annual precipitation and periods of drought, up to 2020, there is no unilateral trend across the measurement stations, in terms of annual precipitation or the number of consecutive dry days. However, there is a generalised increase in intensity. This increases the risk of flooding. "A growing trend is seen (maximum precipitation in 1 and 5 days has a significant upward trend in 59 and 65% of the stations respectively, and the maximum precipitation in one hour shows an upward trend in 54% of the stations), such as the frequency (number of rainy days > 20 mm has risen significantly in 47% of stations)." So, for the time being, with data to 2021, there are no significant differences in terms of volume of precipitation. However, a change in intensity has been observed.

This might be included in the reasons explaining why, a growing trend was seen in flood damage in the period from 1996 to 2021, particularly damage caused in 2019 and 2021.

Property damage caused by flooding assumed by the Spanish Insurance Compensation Consortium (CCS) Amount in Million euros.

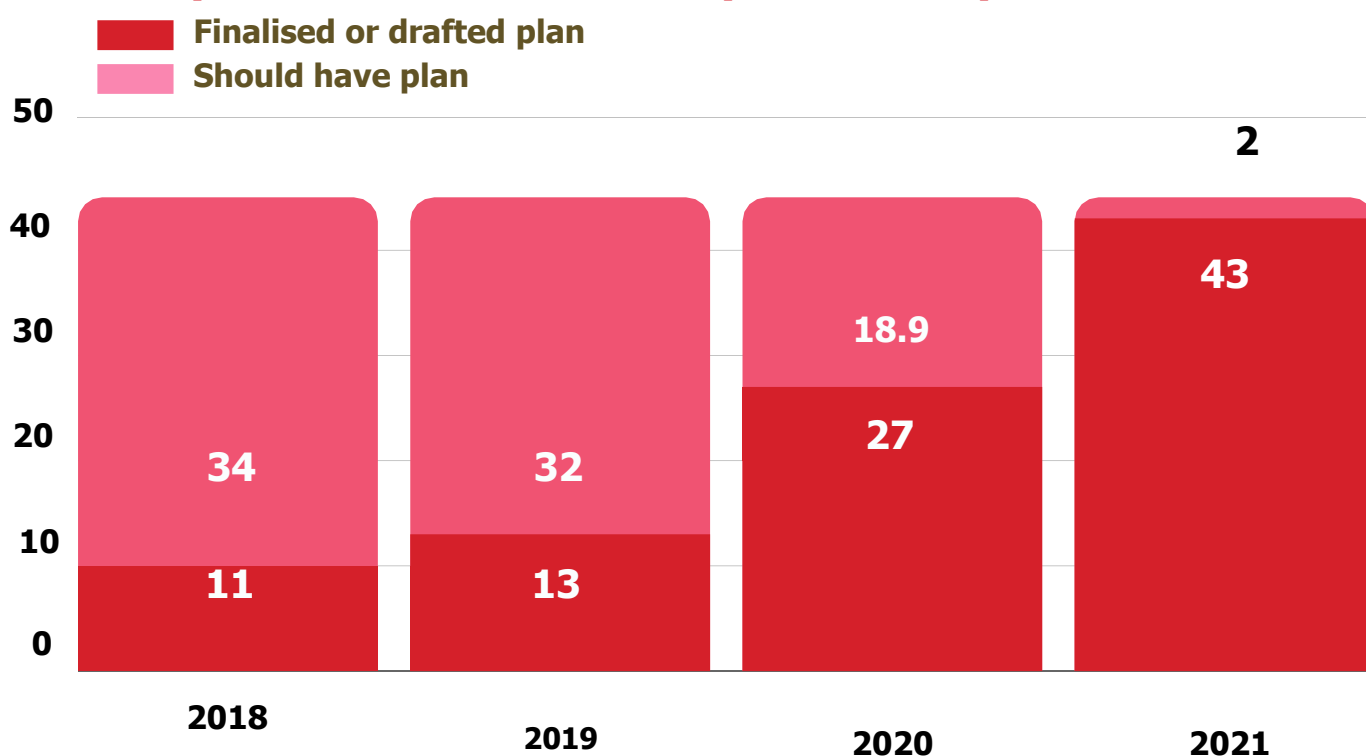


Source: Own work using LIFE Nadapta data
<https://monitoring.lifenadapta.eu/pages/inundacion>

Plans for self-protection against floods

As part of the adaptation, an objective has been set for town councils in the risk zones to devise local self-protection plans against flooding. A total of 45 town councils have been identified and between 2020 and 2021, the total of 27 plans rose to 43 plans. This means that only two town councils did not have a plan by the end of 2021.

Municipalities with local self-protection plans



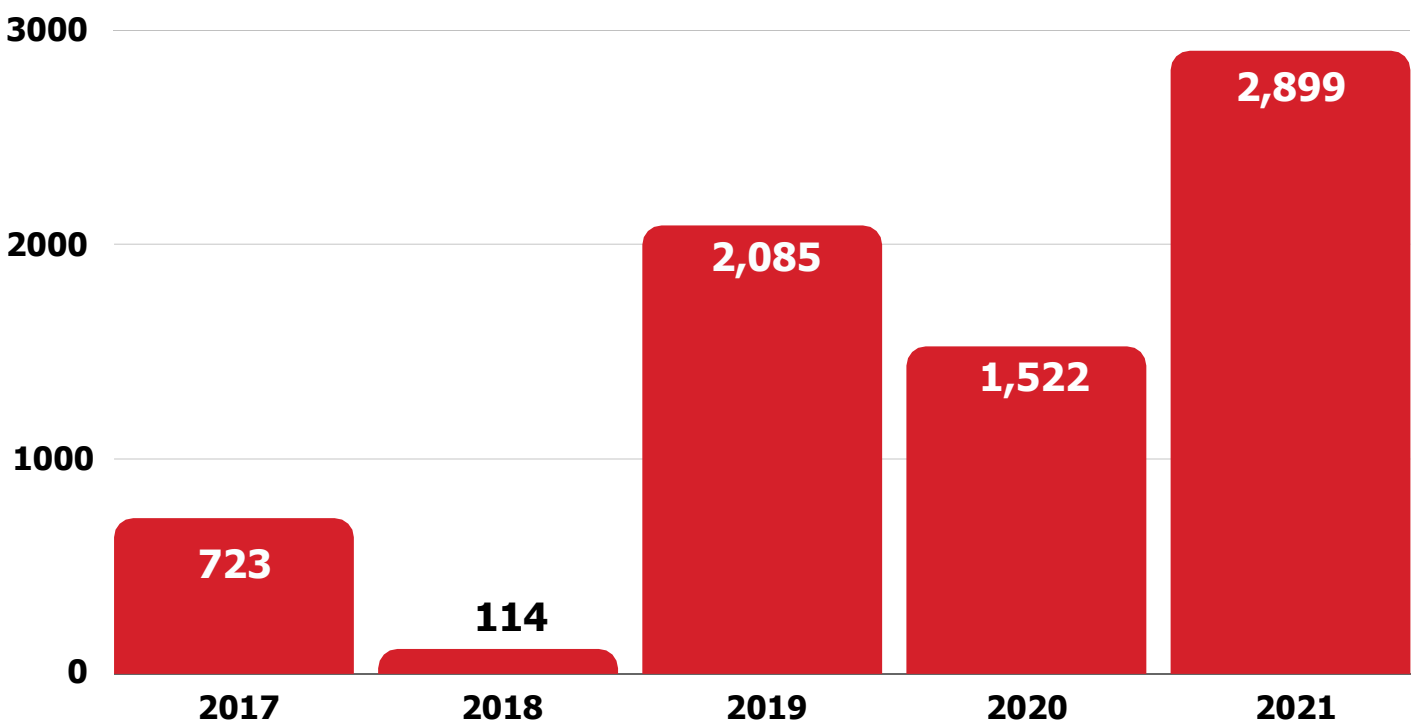
Source: Own work using LIFE Nadapta data
<https://monitoring.lifenadapta.eu/pages/inundacion>

Temperatures and forest fires

An increase in average temperatures has been registered in Navarre. Taking the period 1991-2019, the trend shows that the average temperature has risen by 0.23 per decade. For the 2021-2050 period, an increase of 0.29 centigrade per decade has been forecast.

This increase in temperature, alongside changes in precipitation patterns represents a greater risk of forest fires, predicting that the average hazard indices will rise throughout the 21st century.

Total surface area (ha) incinerated every year



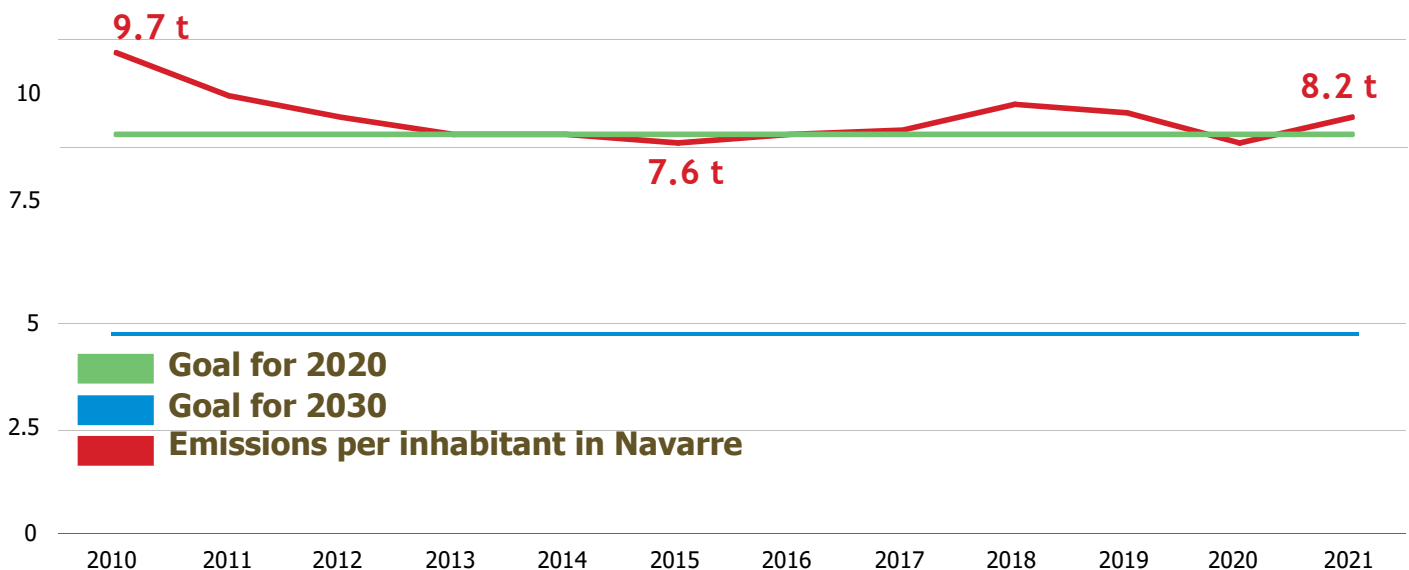
Source: Own work using LIFE Nadapta data
<https://monitoring.lifenadapta.eu/pages/inundacion>

Sustainable Development Goal Monitoring

Given that climate action is a UN sustainable development goal, it also forms part of the [Government of Navarre SDG monitoring system](https://ods-agenda2030.navarra.es/pages/resumen). Available on: <https://ods-agenda2030.navarra.es/pages/resumen>

This Goal mainly uses three indicators for Navarre: greenhouse gas emissions, percentage of renewable energy over final energy consumption and primary energy consumption.

Tonnes of GHG emissions per capita



Source: [Own work using data from the KLINA: https://ods-agenda2030.navarra.es/pages/objetivo13-comparativa](https://ods-agenda2030.navarra.es/pages/objetivo13-comparativa)

Tonnes of CO2 emissions avoided by generating electricity using renewable sources

Energy transition towards renewable energy sources means taking a path towards a more sovereign energy model such as a reduction in CO2 emissions. In the 2021 energy report, it is estimated that electricity production from renewable sources has avoided the emission of 605,895 tonnes of CO2 into the atmosphere.



T of CO2e avoided by generating electricity from RE

| Year | 2019 | 2020 | 2021 |
|------------------------|---------|---------|---------|
| Tonnes of CO2e avoided | 709,685 | 482,967 | 605,895 |

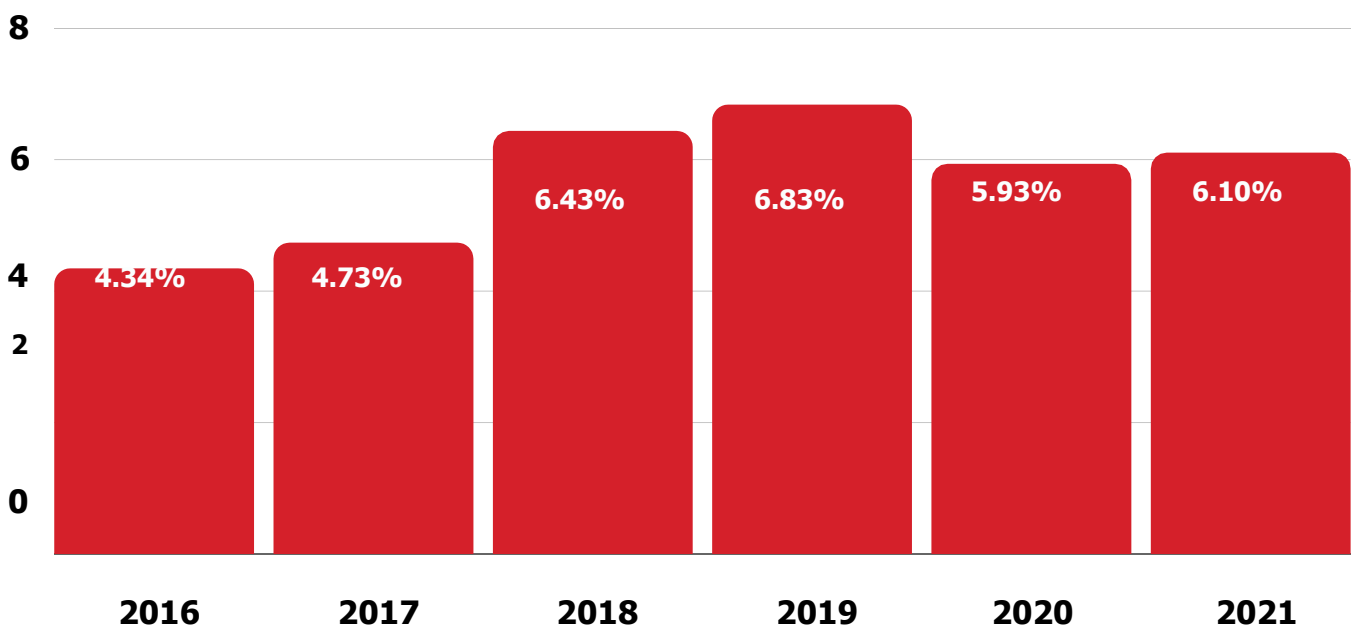
Source: 2021 Navarre Energy Report

Renewable energy in transport:

Transport is a major source of greenhouse gas emissions in the tourism sector. One way of reducing transport emissions is to increase the use of renewable energies in the sector.

The European Union has set the goal of covering 10% of transport needs using renewable energies. For 2025, the goal must be 12% and the Navarre Energy Plan-Horizon 2030 has set the goal of 15% by 2030. The 2021 figure was 6.1%, 3% more than in 2020 and 27.6% more than 10 years ago in 2011.

Renewable energy in Transport



Source: Navarre Energy Reports 2016-2021

http://www.navarra.es/home_es/Temas/Empleo+y+Economia/Energia/I-balancesenergeticosnavarra.htm

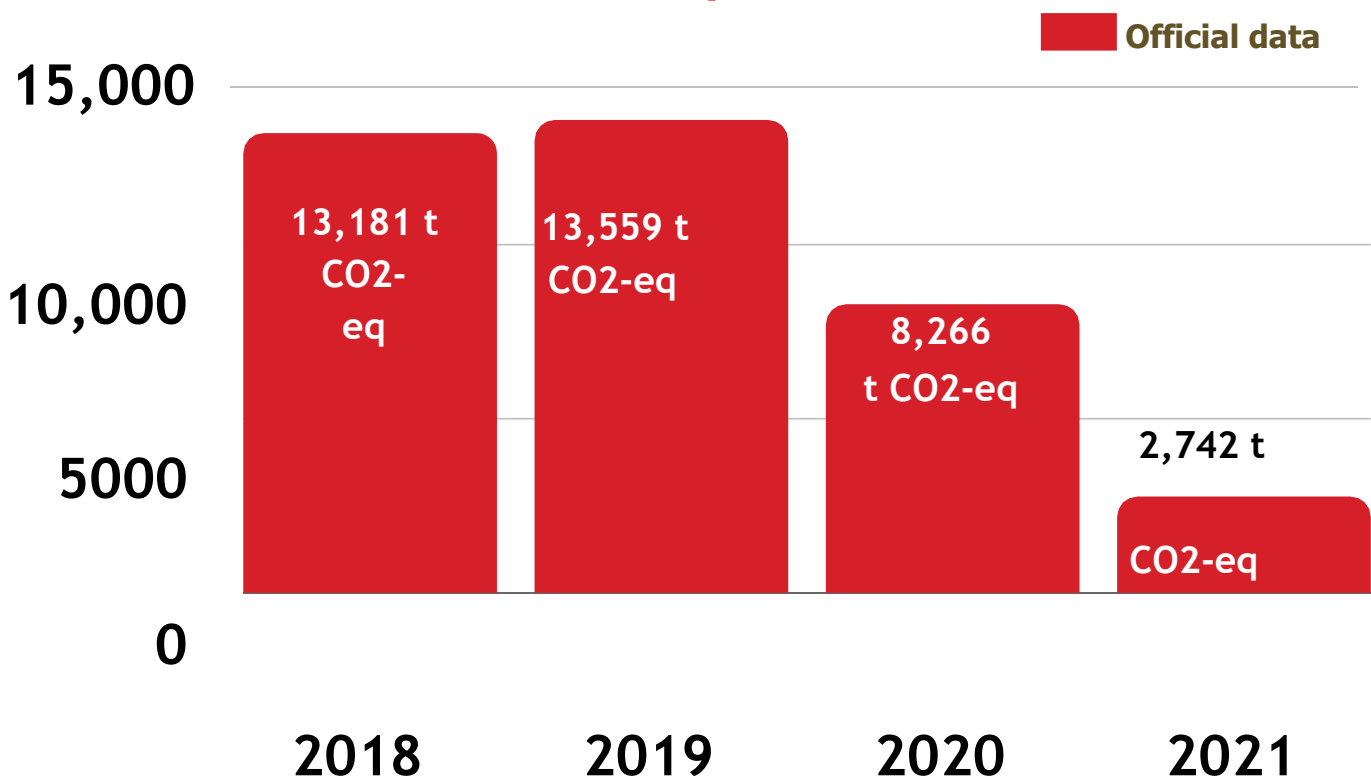
In 2021, 111,233 commercial passengers used Noain-Pamplona airport.

Air Transport

Air transport has particularly high emissions per person transported. In Navarre, air transport is not the main mode of transport to travel to Navarre and according to our own work using microdata from Frontur, the proportion of tourists who come to Navarre by plane was around 22.6% during 2021.

Regarding Greenhouse Gas emissions from air transport, the official data only considers planes that go to the Noain-Pamplona airport which is the only major airport in Navarre. The graph below presents the emissions data for the last four years.

CO2 emission from air transport



Source: Inventory of greenhouse gases (GHG) 2018-2021
<https://www.navarra.es/es/medio-ambiente/inventario-de-gases-de-efecto->

Tourist Information Offices (TIO):

Using data from 2021, the carbon footprint has been studied for tourist offices in the Government of Navarre's network although only 5 offices were considered, as some offices belong to other entities. The CO2 emission has been calculated as scope 2.

The result presents emissions of 12.44 tonnes of CO2e during 2021. 7.8% of this is due to electricity consumption in two offices housed in facilities which do not belong to the government, while most emissions come from the consumption of fossil fuels, specifically propane and natural gas for heating.

However, the road ahead clearly involves directly reducing the consumption of fossil fuels for heating/air conditioning, although this endeavour is hampered by other conditioning factors, at least for the time being, so the main goal of the measures from this plan is to reduce emissions derived from electricity consumption which have a lower specific weight on the footprint.

Consequently, in the short term, measures will be taken such as:

- Replacing inefficient light bulb and light fittings with highly efficient equipment using LED technology.
- Reduction of air infiltration by using passive systems.

This study was devised working with the General Directorate of Tourism, Trade and Consumption, the public company Gestión Ambiental de Navarra S.A. GAN-NIK and the tourist offices.



Calculation of the footprint for Navarre's tourism sector

The tourist information offices represent a small fraction of tourism's total emissions in Navarre and so another study kicked off to estimate the CO2-eq footprint for the entire tourist sector. As well as calculating a specific number, this project will provide starting data on which to make improvements, working from the principle that "if it can't be measured, it can't be managed". For the time being, we do not have any publishable results, although the total calculation would consider: Number of tourists and day-trippers, Accommodation, Food/catering/leisure/entertainment/shopping, energy consumption, internal transport, solid waste, water management, tourist management and offer (public and private infrastructures).

This project is being run jointly with the Valencian company Global Omnium.



Certificates and seals:

The Directorate of Tourism, Trade and Consumption aims to promote quality, sustainability and accessibility in the tourism companies within the framework of the third action programme in the Navarre Strategic Tourism Plan 2018-2025, particularly by granting subsidies to achieve climate-action certification:

- a) EMAS (Regulation CE 1221/2009).
- b) ISO14001 Environmental management.
- c) ISO 50001 Energy efficiency management.
- d) ISO 21401. Sustainability management system for accommodation.
- e) Ecolabel.
- f) "Calculate-reduce-consume" seal.

Ecolabel

The European Union Ecolabel is a voluntary standardised certificate awarded for environmental excellence. This seal requires action in seven different areas which are:



1. Optimised environmental management
2. Reduction of energy consumption and CO2 emissions
3. Reduction of water consumption
4. Reduction of chemicals and pesticides,
5. Waste generation and separation
6. Reduction of transport emissions
7. Limiting food waste.



Two hotels in Navarre currently hold this certificate.



CONCLUSIONS

- ✓ The effects of the pandemic on tourism are still present in the background in 2021. Restrictions conditioned tourist behaviour and the sector's recovery.
- ✓ Statistics confirm the prominence of rural and local tourism. In this context, the relevance of the local aspect, KM 0 and proximity resources continued to determine the tourist offer.
- ✓ Sustainability is doubtlessly the key to developing the sector. The plans and the strategies driven since the crisis spotlight sustainable, social and circular tourism.
- ✓ Energy consumption and waste emission, in short, tourists' footprint in the destination, have been clearly diminished. Work should now go into making these consequences permanent.

OTHERS AND TOOLS

-  The Government of Navarre Tourism Observatory has set itself the goal to improve the monitoring systems in the various areas of sustainability considered in this report, in an attempt to assess whether the drop in the impact of tourism derived from the pandemic will last, and also make it easier to assess ensuing sustainability strategies.
-  Next Generation Funds will be an essential tool to develop and monitor Tourism Sustainability Plans in destinations. They will doubtlessly take a starring role in future reports.



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