December 31, 2016
Introduction
Triple Sustainability of the Impact Study

In response to the growing awareness and concern among citizens regarding the role that companies and institutions should play in society, this study has introduced new perspectives in the analysis of the impact of the Guggenheim Museum Bilbao’s activities by embracing the concept of triple sustainability or the triple bottom line.

The Triple Bottom Line Approach to Impact Analysis

“Every action you take in business has two components: an impact on profits and an impact on the world.”

Andrew W. Savitz and Karl Weber, authors of the book The Triple Bottom Line

- What is the Museum’s impact in terms of GDP, jobs and tax revenue?
- How has the Museum helped to transform Bilbao and improve the competitiveness of the region? Which sectors of the economy have benefited the most?
- How has the Museum helped to reinforce and promote the image of Bilbao in other countries?

Economic

Environmental

- How is the Museum committed to respecting the environment, preventing pollution and practicing sustainable waste management?
- What sustainable actions or practices implemented by the Museum contribute to a healthier atmosphere and increased efficiency?

Social, Artistic and Cultural

- How has the Museum contributed to the social and cultural development of its context? What are the specific results of this contribution?
- How has the Museum’s new management model influenced the modernization of management models used by other cultural institutions?
- Which initiatives have promoted the integration and development of special collectives (disabled persons, the elderly, etc.)?
- Which initiatives have helped to enhance the prestige of Basque art and artists?
In accordance with the methodology and purpose of this study as described above, the following summary presents a series of key figures that explain and reinforce the main conclusions drawn from the study, which will be discussed in further detail in subsequent pages.

**Primary Conclusions of the Study**

**Economic**
- 485.3 million euros in demand generated as a result of the Guggenheim Museum Bilbao’s activities
- Increase of 424.6 million euros in GDP, 9,086 jobs maintained, and an additional revenue of 65.8 million euros for the Basque treasuries

**Environmental**
- Selected collection of and decrease in residues: amounts equivalent to 500 containers of paper, 250 of plastic, and 4,890 kilos of cooking oils. Also proper disposal of 1,153 kilos of hazardous waste.

**Social, Artistic and Cultural**
- Over 125,000 Basques visited at least one of the Museum’s exhibitions in 2016 (5% of the population of Euskadi)
- 34,000 schoolchildren, 8,700 families, and approximately 3,000 people participated in socially-oriented educational programs.

*After 2009, this figure includes people who participated in online activities, an area that has grown substantially in recent years.*
EXECUTIVE SUMMARY

Using the input-output tables for the Basque regional economy, the economic impact study allows us to evaluate the demand generated by the Museum's activities in terms of GDP and jobs in the Basque Country and to quantify the revenue collected by the Basque treasuries as a result.

Model for Evaluating the Economic Impact of the Guggenheim Museum Bilbao's Activities

**Final Demand: Guggenheim Museum Bilbao 2016**

1. **Expenditure INSIDE the Museum**
   - Recreational and cultural activities (ticket sales, guided tours, etc.)
   - Catering (expenditure in the Museum restaurant, café, etc.)
   - Retail sales (expenditure in store)
   - Other business activities
   - Hospitality industry (lodging, restaurants, and similar)
   - Ground transportation (for traveling to and around Bilbao)
   - Recreational and cultural activities (expenditure on leisure/entertainment).

2. **Expenditure OUTSIDE the Museum**
   - The total amount spent by visitors OUTSIDE the Museum during their stay in the Basque Country (hotels, restaurants, transportation, and leisure).

**Ripple Effect: The Leontief Model**

- **Direct Impact**: Evaluation of expenditure made by public and private agents participating in activities associated with the Guggenheim Museum Bilbao.
- **Indirect Impact**: Economic impact is not limited to direct effects, as those who benefit directly from the Museum’s activities must in turn place orders with various suppliers to meet the demand generated, thus initiating a second round of transactions in which those suppliers must increase orders placed with their own suppliers, and so on.
- **Induced Impact**: The increase in production creates more jobs and more income derived from employment, which in turn stimulates household consumption.

**Economic Impact**

- **GDP**: Increase in the overall wealth of the Basque Country thanks to the Guggenheim Museum Bilbao’s activity.
- **Jobs**: Average number of equivalent jobs maintained each year thanks to the activity generated by the Museum.
- **Taxes**: Increase in the amount of revenue payable to treasuries (VAT, personal income tax, and corporation tax).
In order to calculate **FINAL DEMAND**, we must estimate the economic activity generated by agents associated with the activities of the Guggenheim Museum Bilbao. To this end, we have considered the following factors:

- **Expenditure by companies, individuals, and institutions inside the Guggenheim Museum Bilbao** in the form of wire transfers, subscriptions, direct and indirect sponsorship, fees, and other contributions, as well as expenditure by visitors inside the Museum when purchasing tickets, buying merchandise at the Museum store, or using the café-restaurant. This information was taken from the Museum budgets.

- **Expenditure related to the organization of events at the Museum** (symposia, book launches, award ceremonies, lectures, etc.) was taken from the budgets of the Guggenheim Museum Bilbao.

- **Expenditure by visitors outside Museum facilities on lodging, transportation, shopping, leisure, and catering services** was calculated based on the results of a survey conducted in December 2015, as well as March and August 2016 in which a total of 3,219 people were interviewed. The study revealed a significant increase in the average expenditure per visitor.

### Estimation of FINAL DEMAND

#### Expenditure INSIDE the Museum (Visitors+companies)*

<table>
<thead>
<tr>
<th>A. Ticket sales</th>
<th>Total ticket sales in €</th>
<th>Total tickets = A</th>
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<tr>
<td>B. Museum store sales</td>
<td>Total Museum store sales in €</td>
<td>Total sales = B</td>
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<tr>
<td>C. Expenditure in restaurant (not just concession)</td>
<td>Total restaurant expenditure in €</td>
<td>Total restaurant = C</td>
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<tr>
<td>D. Subscriptions, sponsorship, and subsidies</td>
<td>Total subscriptions, sponsorship, and subsidies in €</td>
<td>Total SS&amp;S = D</td>
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<tr>
<td>E. Other income</td>
<td>Total other income in €</td>
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*Data obtained from the financial records of the Guggenheim Museum Bilbao*

#### Visitor expenditure OUTSIDE the Museum

No. of tourists x Average expenditure ** = Total expenditure (by place of residence) (by place of residence)

| F. Museum visitor expenditure on lodging | \[ X_n \times Y_n \€ = X_n \times Y_n \€ \] |
| G. Transportation expenditure (to reach Bilbao and within the Basque Country) | \[ X_n \times Z_n \€ = X_n \times Z_n \€ \] |
| H. Catering expenditure | \[ X_n \times V_n \€ = X_n \times V_n \€ \] |
| I. Shopping expenditure | \[ X_n \times W_n \€ = X_n \times W_n \€ \] |
| J. Expenditure on leisure and other activities | \[ X_n \times P_n \€ = X_n \times P_n \€ \] |

**Data obtained from 3,449 surveys conducted during 2011**

#### TOTAL DEMAND – Guggenheim Museum Bilbao

<table>
<thead>
<tr>
<th>Expenditure INSIDE the Museum</th>
<th>Total ticket sales in €</th>
<th>Total Museum store sales in €</th>
<th>Total restaurant revenue in €</th>
<th>Total subscriptions, sponsorship, and subsidies in €</th>
<th>Total other income in €</th>
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<tbody>
<tr>
<td>A</td>
<td></td>
<td>B</td>
<td>C</td>
<td>D</td>
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<table>
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<tr>
<th>Expenditure OUTSIDE the Museum</th>
<th>Total lodging expenditure in €</th>
<th>Total transportation expenditure in €</th>
<th>Total catering expenditure in €</th>
<th>Total shopping expenditure in €</th>
<th>Total leisure expenditure in €</th>
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<tr>
<td>F</td>
<td>G</td>
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**Total Demand = A+B+C+D+E+F+G+H+I+J**
The final demand generated by the Museum’s activities in the course of 2016 amounted to 485.3 million euros. Of this amount, 32.2 million or 6.64% were spent inside the Museum (tickets, guided tours, store, special events, etc.), while the amount spent outside the Museum by visitors during their stay was 453.1 million euros. The greatest impact was on the hospitality industry (lodging and catering).

**Source:** in-house report based on data supplied by the Guggenheim Museum Bilbao and the results of 3,219 surveys

*Includes expenditure generated by the restaurant, not just the amount derived from its concession.

**Source:** in-house report based on data supplied by the Guggenheim Museum Bilbao
The activities of the Guggenheim Museum Bilbao in 2016 have helped to generate 424.6 million euros in GDP, maintain 9,086 jobs, and provide the Basque treasuries with an additional 65.8 million euros in tax revenue, taking into account direct, indirect, and induced effects.

* Final figure of visitors in 2016 based on data supplied by the Museum
** After 2006, this also includes induced impact

Note: In 2016 a methodology change has been introduced to adapt the economic impact estimation model to the current context. This is why, the results are not strictly comparable to those obtained in previous years

Source: in-house report based on data supplied by the Guggenheim Museum Bilbao