



2024

ANNUAL REPORT

Indicadores

Research, Development and Innovation (RDI) Area

*We transfer knowledge,
we transform the future*



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH

A glance at the RDI indicators for 2024

GENERAL INDICATORS

Revenue

€106.2 m

International projects*
€50.3 m

National projects
€32.6 m

Contracts and services
€14 m

Expenditure

€83.9 m

Staff
€38.3 m

Transfers and subsidies
€21.7 m

External services
€8.2 m

Contract revenue

€111.4 m

International projects*
€64 m

National projects
€29.4 m

Contracts and services
€11.4 m

New projects

834

Contracts
414

National
194

International
98

Publications**

4,580

Journal articles
2.233

Conference pres.
1,395

Doctoral theses
379

RESEARCH OUTPUT

INNOVATION

Technology-based companies

10

Revenue from royalties

€432,062

Priority patents***

23

Licences contracted

3

European patents

17

Investment mobilised

€49.2 m

State entity in Horizon Europe

2nd

Projects substantiated

781

Project applications submitted

870

Requirements met

242

OTHER

* Also includes coordinated projects (revenue that is then redistributed among other project partners).

** The number of publications is increasing as the publications from 2023 are registered in Futur. May 2024 data.

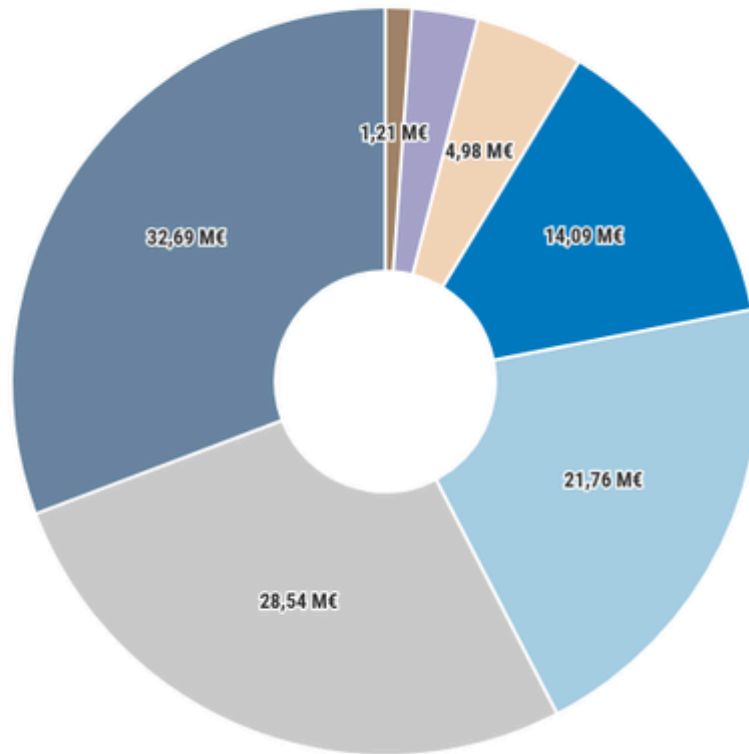
*** A total of 7 patents were also extended through an application for an international patent extension (PCT).



Revenue

The figure of one hundred million euros in revenue was again exceeded in 2024

■ Contracts and Services
 ■ Training
 ■ National Projects
 ■ International Projects
■ Coordinated International Projects
 ■ Donations/Grants
 ■ Other



In 2024, the UPC consolidated its capacity to raise funds for RDI through various funding streams. The weight of national and international research projects is particularly noteworthy, as they represent most of the University's income and demonstrate its key role in science and technology. Contracts and services involving companies and institutions, donations, subsidies and training strengthen the UPC's links with the productive and social fabric.

Total revenue by RDI activity in 2024

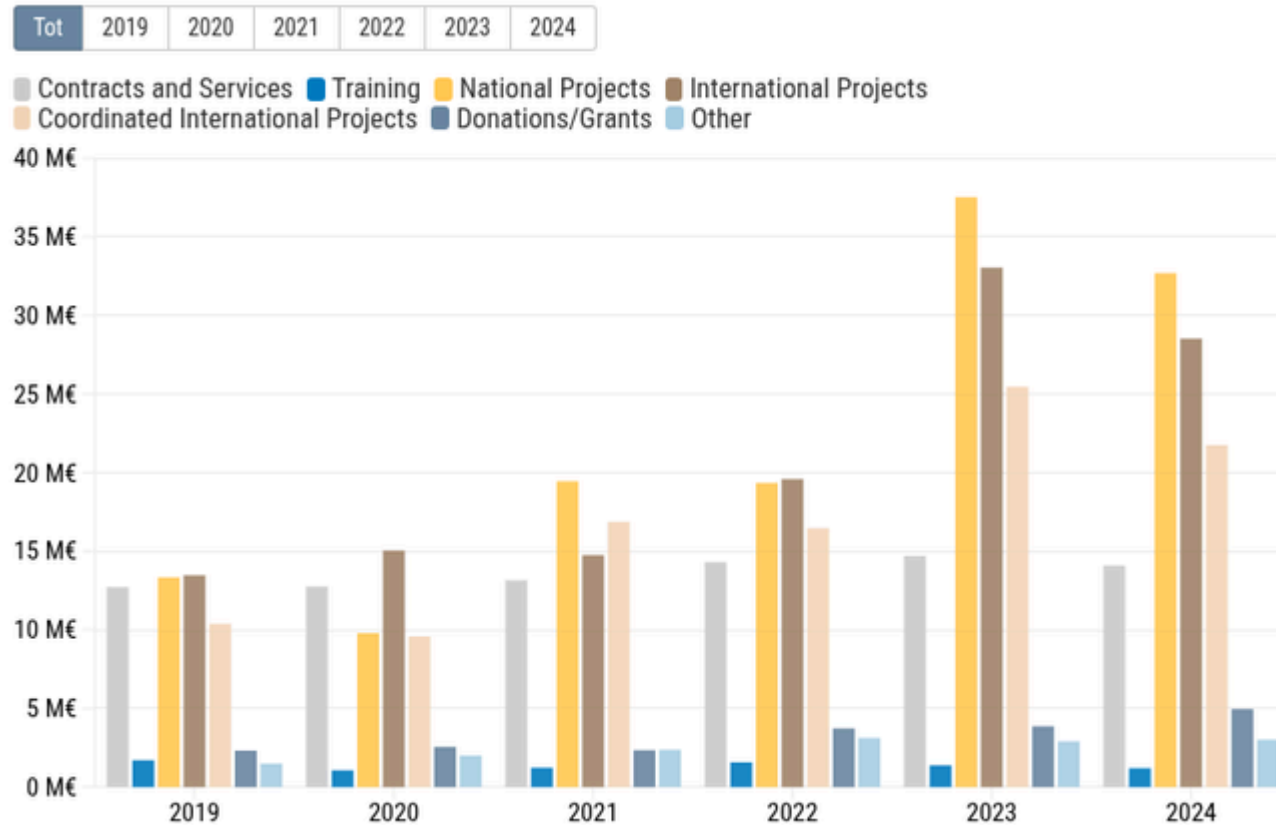
€106.29 m



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Evolution of annual revenue

Fundraising growth has stabilised in an upward trend over recent years



Although 2024 presents a slight reduction compared to the previous year, total income remains well above pre-2022 levels, which demonstrates the UPC's ability to attract competitive funding in research calls. The sustained growth of recent years has allowed the University to consolidate an economic model in research, innovation and knowledge transfer, while at the same time increasing its international reach.

Total revenue in 2019-2024

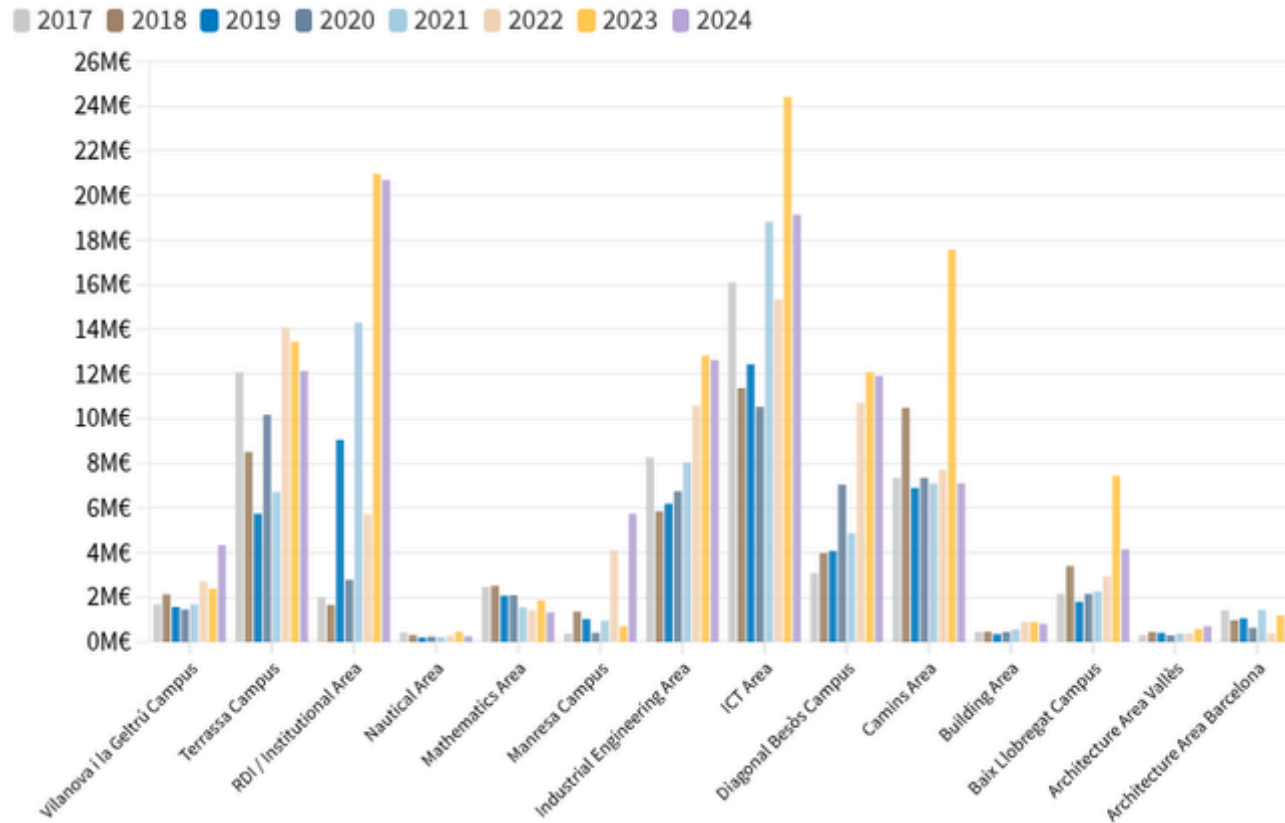
€463.84 m



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Evolution of income and expenditure

The difference between income and expenditure decreased to 20.91%



While the areas with the highest revenue were ICT, Industrial Engineering and RDI Area/ Institutional, other units such as Architecture, Building Construction, Mathematics, Nautical Science and the campuses made significant contributions. The data reflect the diversity of funding at the UPC and the combined weight of research, teaching and innovation in its areas of knowledge.

Total revenue by UTG in 2024

€97.76 m

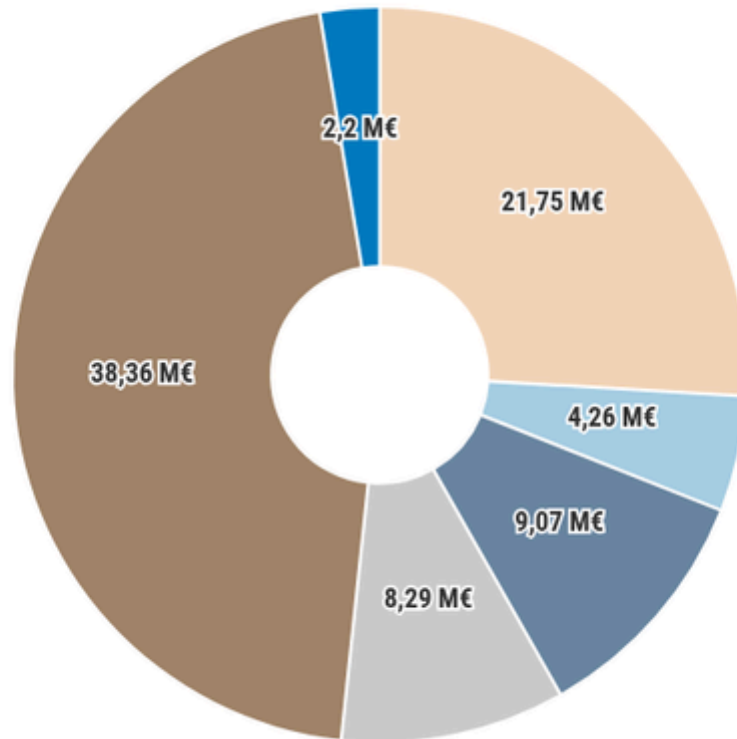
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Expenditure

Investment in staff increased by 24.45% compared to 2023

■ Purchases
 ■ Personnel
 ■ External services
 ■ Inventory materials
 ■ Travel expenses
 ■ Transfers and grants
 ■ Other expenses



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The total amount of expenditure has increased by 57.13% since 2022, a figure that reflects the institution's efforts in several strategic areas of RDI, with a focus on staff. This item continues to be the most significant, followed by investment in transfers, subsidies and external services. Resources are distributed across multiple items to guarantee the proper functioning of the entity.

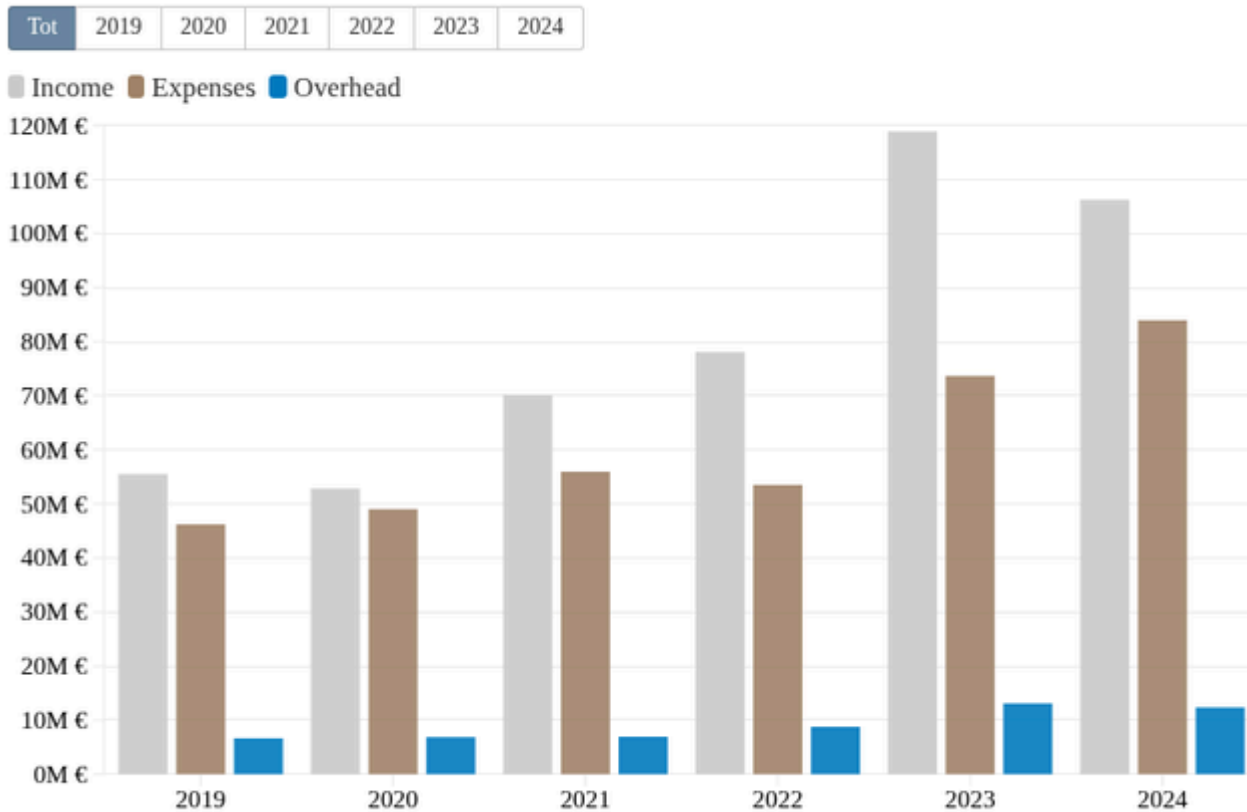
Total expenditure in 2024

€83.94 m



Evolution of income and expenditure

The difference between income and expenditure decreased to 20.91%



In 2024, revenue amounted to €106,292,346.00, while total expenditure was €83,945,741.00, leaving a positive margin of €22,346,605.00. Overhead, with a value of €12,324,292.00, represents approximately 14.4% of income and 14.7% of expenditure. Overall, the data show an economic situation with positive results.

2024 overhead

€12.32 m

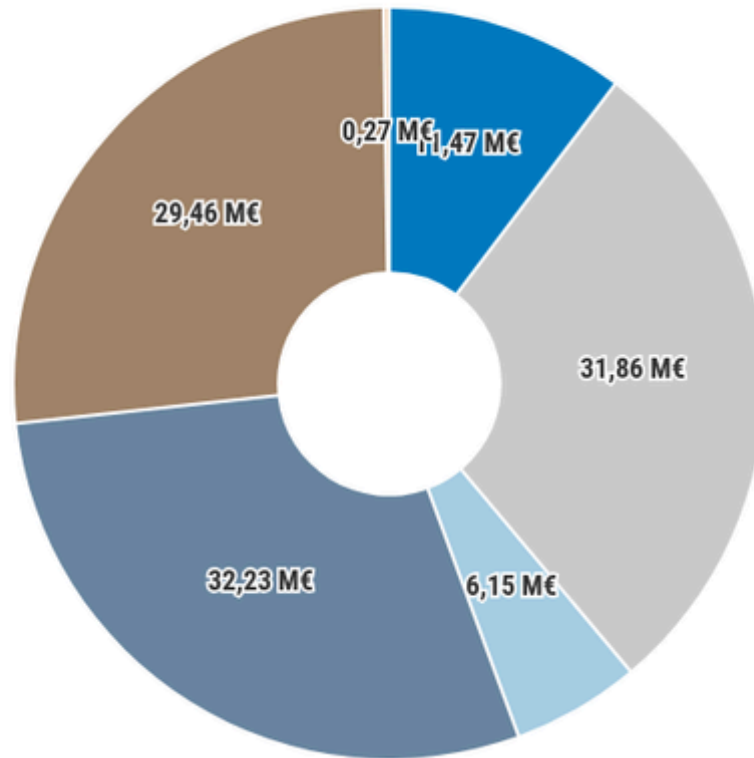


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Contract revenue in 2024

An increase of 2.84% compared to the previous year

■ Contracts
 ■ National projects
 ■ International projects
 ■ Coordinated international projects
 ■ Donations/Grants
 ■ Others



Total contract revenue experienced a slight increase of 2.84% in 2024 compared to the previous year, reaching 111.4 million euros compared to 108.35 million in 2023. This increase was mainly due to the increase in international projects and coordinated international projects, which together total more than 64 million euros. Also worthy of note is contract revenue from donations and subsidies, which increased significantly in 2024, by 40.9%.

Total contract revenue in 2024

€111.42 m

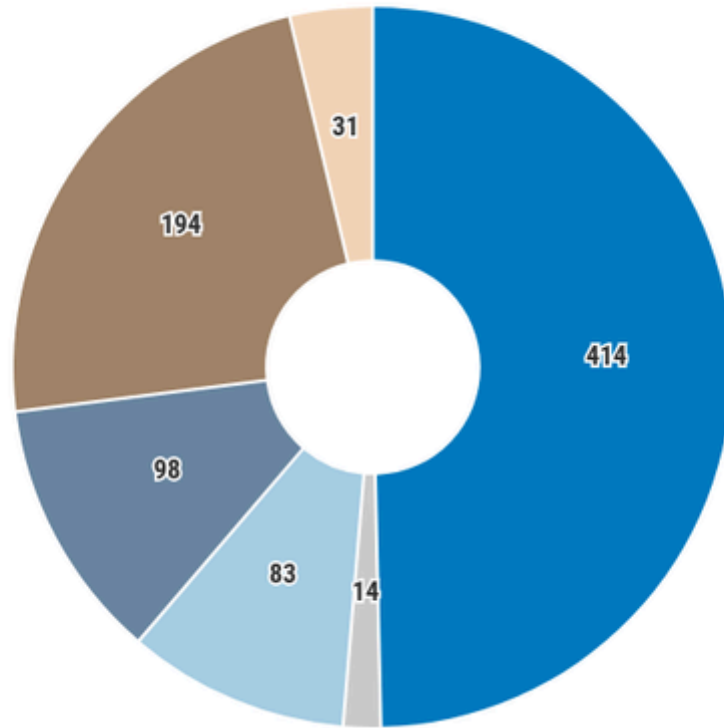


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Contract revenue by number of projects in 2024

An outstanding number of contracts and agreements with companies were registered

■ Contracts
 ■ National projects
 ■ International projects
 ■ Coordinated international projects
 ■ Donations/Grants
 ■ Others



In 2024, a total of 414 contracts and agreements were signed with companies and institutions, 194 national projects resulting from RDI calls, 112 international projects, of which 14 were coordinated by the UPC, 31 donations or subsidies and 31 contracts for other services, including 9 for training.

Total number of RDI projects in 2024

834



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Evolution of contract revenue

Contract revenue continues at a good pace



Contract revenue linked to RDI activity has experienced a significant evolution in recent years, with a sustained increase in the total volume managed. The year 2024 closed with a total of 111.4 million euros, and the upward trend of recent years was maintained. Coordinated international projects became consolidated, with over 38 million euros.

Total contract revenue in 2019-2024

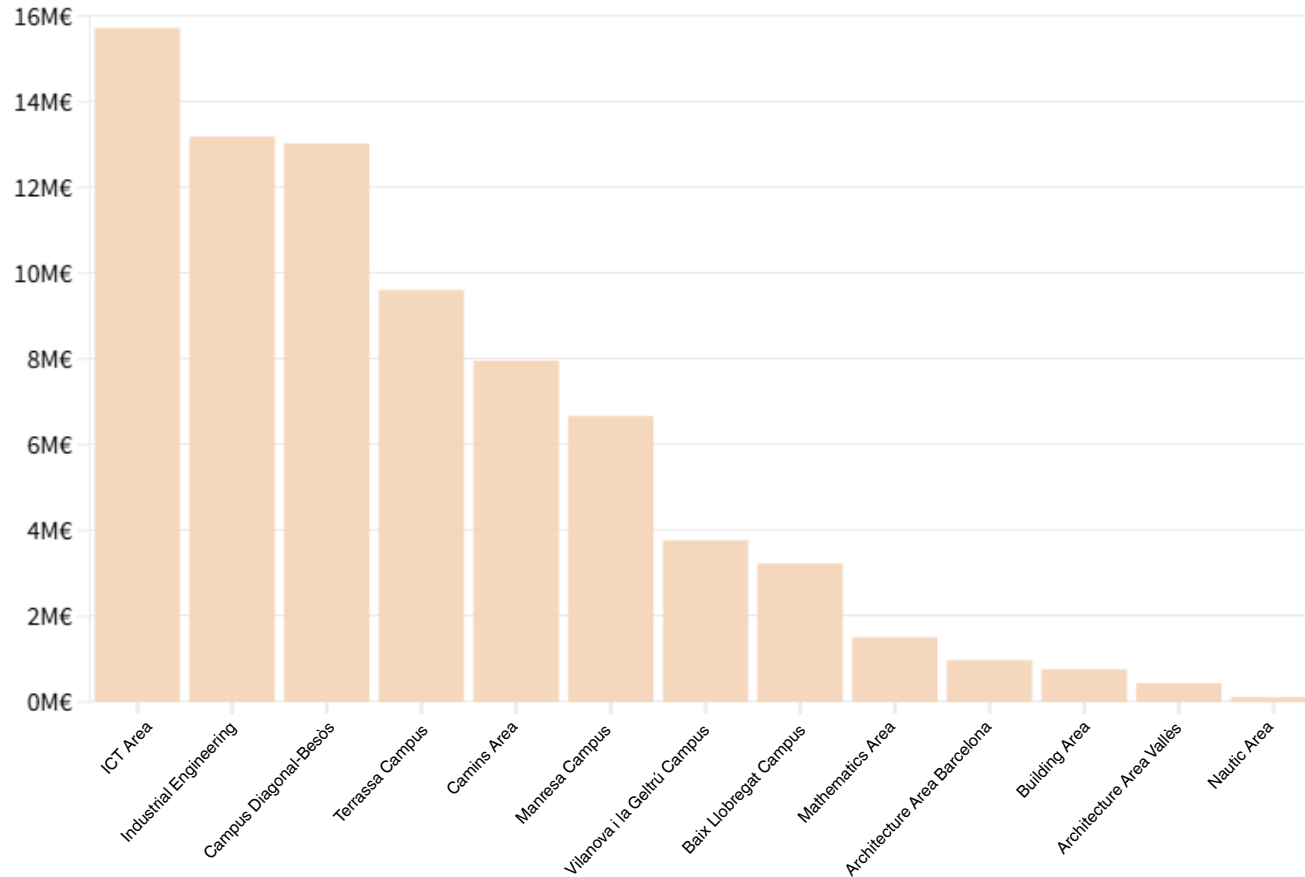
€536.46 m



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Contract revenue by UTG (amount)

The ICT field concentrates the largest volume of contract revenue, followed by Industrial Engineering



The contract revenue activity managed by the UTGs maintained a positive dynamic, with a total volume that reflects a significant distribution between different areas and campuses. The ICT and Industrial Engineering areas stand out, with managed amounts of 15.7 and 13.2 million euros respectively. As far as geographical distribution is concerned, the Diagonal-Besòs (€13 m) and Terrassa (€9.6 m) campuses stand out.

Total contract revenue in 2019-2024

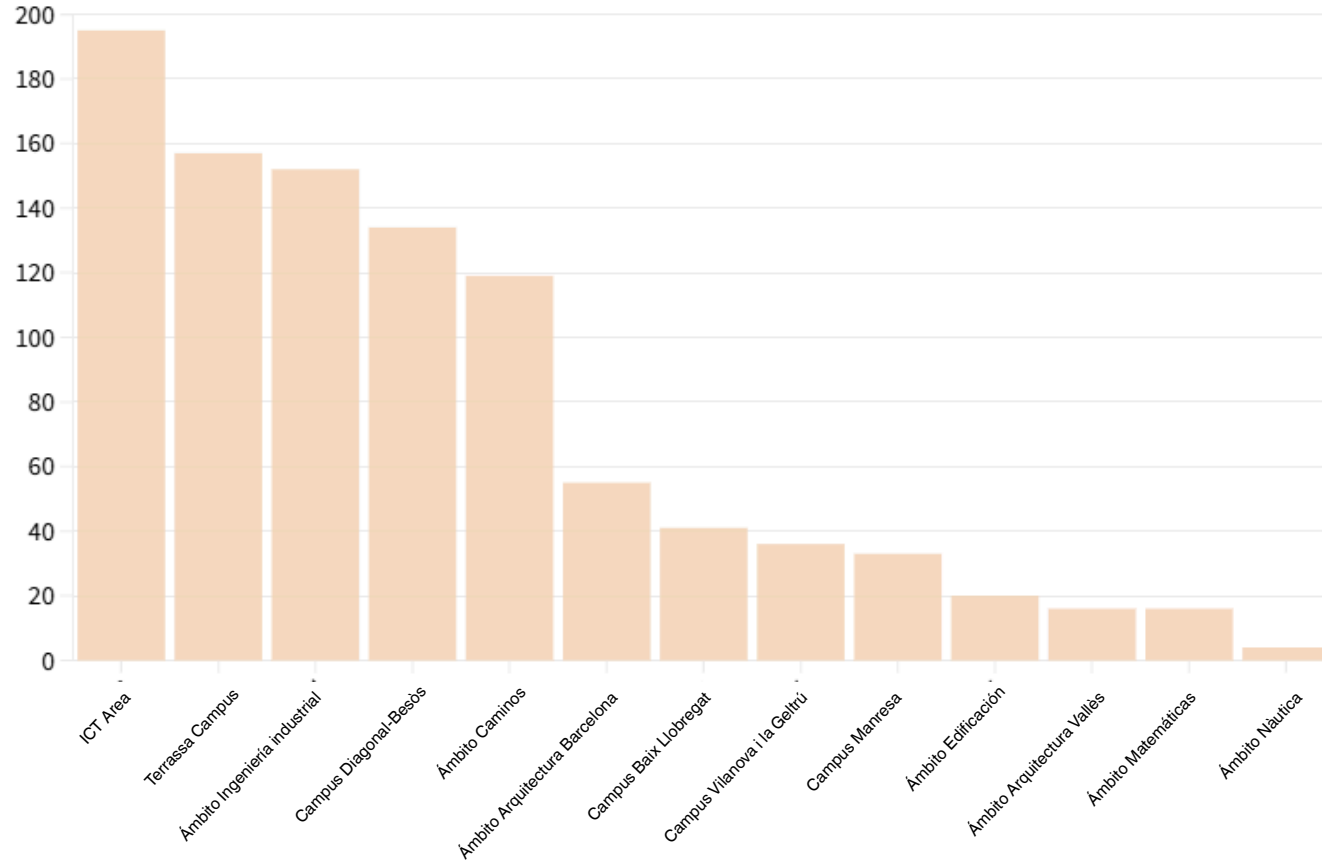
€502.06 m



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Contract revenue by UTG (projects)

ICT, Terrassa and Industrial Engineering continue to lead contracts by number of projects



In terms of contracting by number of projects, the ICT field leads the ranking with 195 contracts, followed closely by the Terrassa Campus (157) and Industrial Engineering (152).

The Diagonal-Besòs Campus (134) and Civil Engineering (119) are also worthy of note.

Total contracts in 2019-2024

978

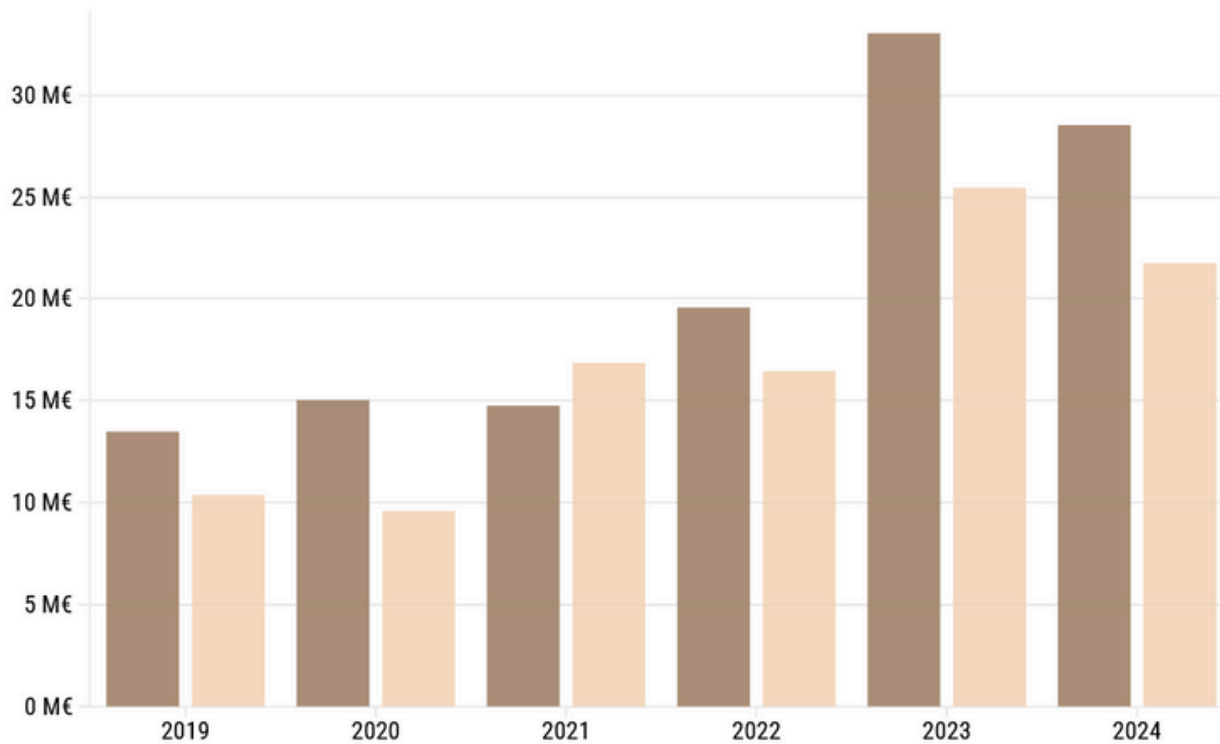


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Evolution of revenue from international projects

Includes participated and coordinated projects

■ Contracts and services
 ■ Training
 ■ National projects
 ■ International projects
■ Coordinated international projects
 ■ Donations/Grants
 ■ Others



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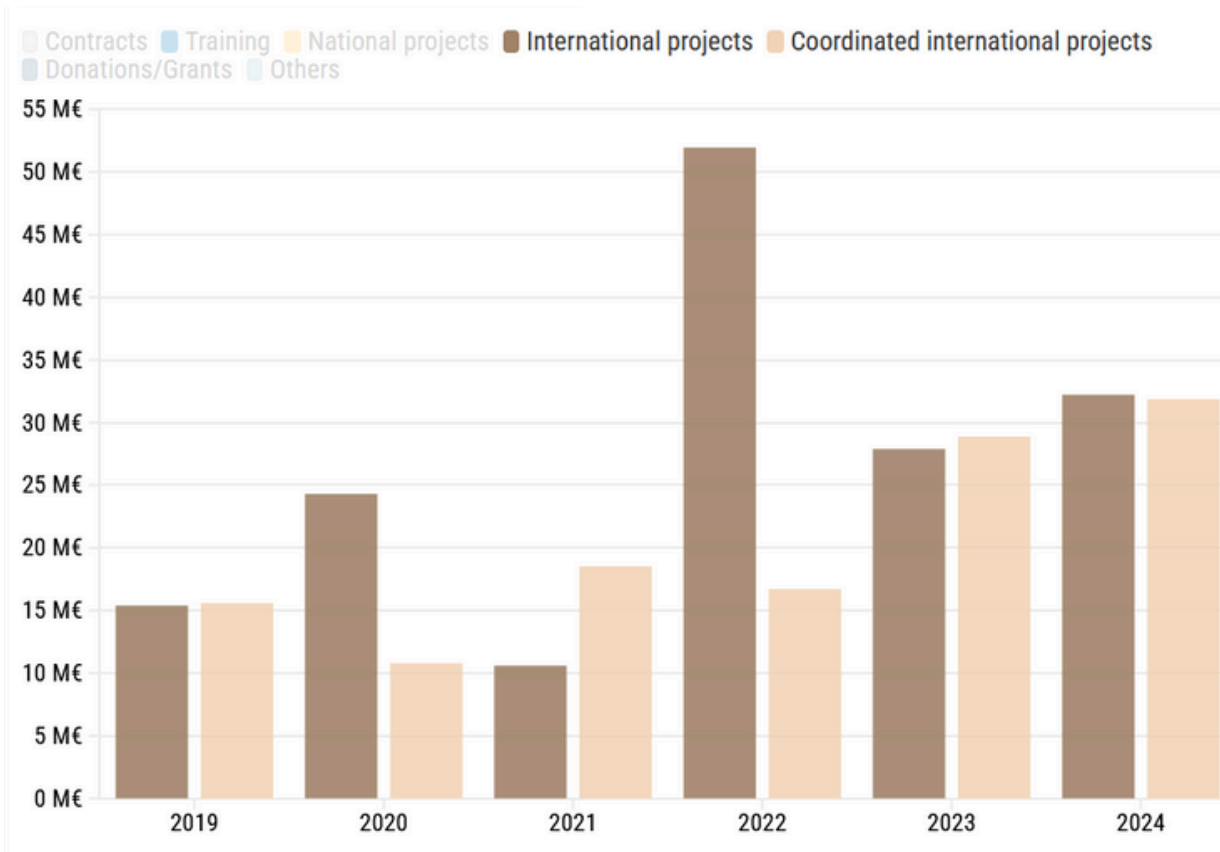
Revenue from international projects in 2024

€50.3 m



Evolution of contract revenue by international project

Includes participated and coordinated projects



Contract revenue linked to international projects has continued to be prominent in RDI activity in recent years, both in volume and in sustained growth. In 2024, a total of 32.2 million euros was reached in international projects and 31.9 million in coordinated international projects, figures that represent a new historical maximum in the latter.

Contract revenue for international projects in 2024

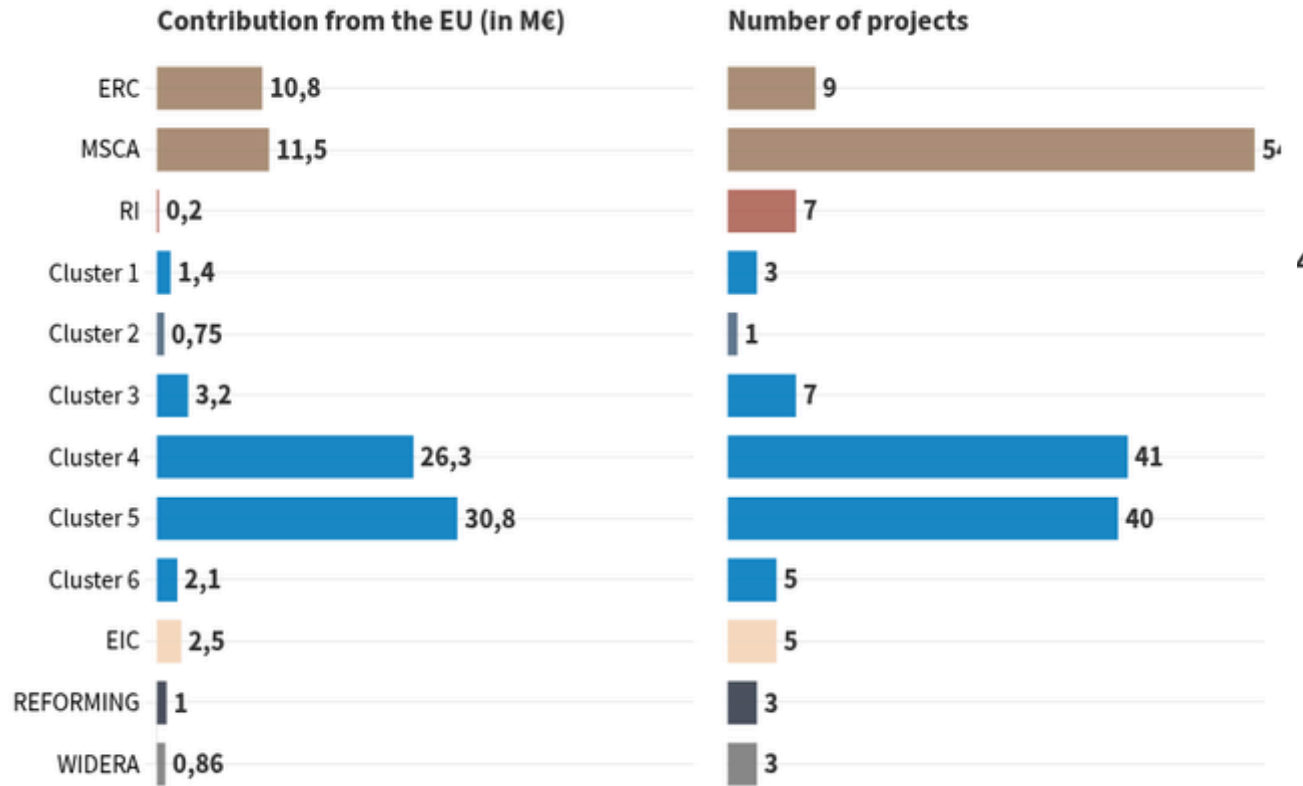
€64.17 m



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Participation in Horizon Europe

Table of the programme's overall results from 2021 to 2024



The UPC's participation in the Horizon Europe programme continues to show solid dynamics with a total of 55 projects funded in 2024 and a contribution of 30.6 million euros, which adds up to a total of 91.5 million euros accumulated throughout the programme. This year, projects in clusters 4 and 5 stand out especially, with 10 and 11 projects respectively and contributions exceeding 5 million euros and 10 million euros. Marie Skłodowska-Curie Actions (MSCA), with 12 projects and 3.8 million euros, and the European Research Council (ERC), with 4 projects totalling 3.2 million euros, also had a significant impact.

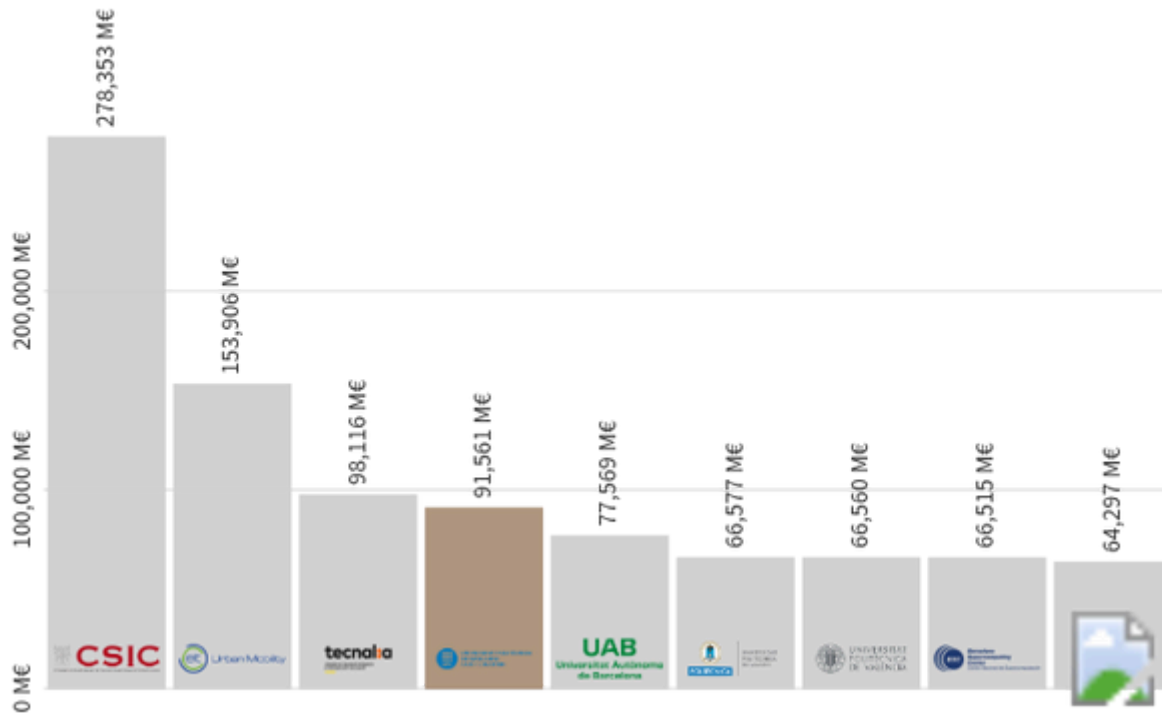
EU contribution to Horizon Europe projects with UPC participation in 2024

€30.68 m

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2021-2024 Horizon Europe comparison with other entities in Spain

The top Spanish university in the amount for European projects



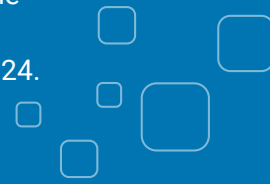
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The UPC consolidated itself in 2024 as the university in Spain that raises most Horizon Europe funds after the CSIC, EIT Urban Mobility and Tecnalia, and ahead of other prominent agents within the Spanish university ecosystem such as the UAB, the UPV, the UPM and the UPF. This result reflects the excellence and competitiveness of the research carried out at the UPC.

EU contribution to Horizon Europe projects with UPC participation in 2021-2024

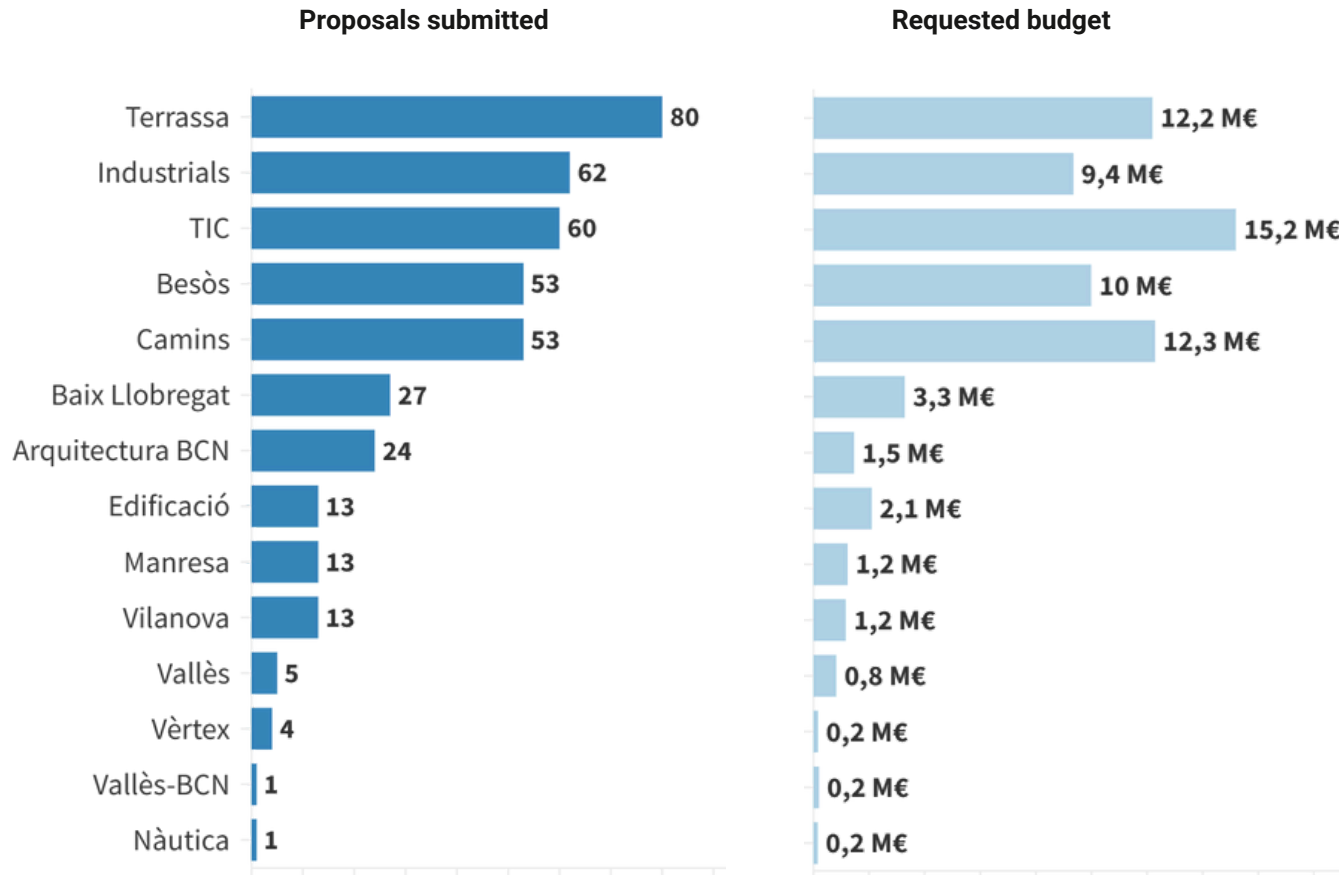
€91.5 m*

* This refers to the amount of all Horizon Europe projects signed by the UPC over the course of the Horizon Europe framework programme up to the year 2024.



National projects

Participation by management and support unit (UTG)



* Includes 136 proposals from 2023 calls of the AEI for PID and CPP. Although these calls were published in 2023, they were managed and submitted at the beginning of 2024.

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Terrassa submitted 80 project proposals in national, autonomous community and local competitive calls. It is followed by the Industrial Engineering and ICT areas.

In terms of budget, the proposals submitted total almost 70 million euros.

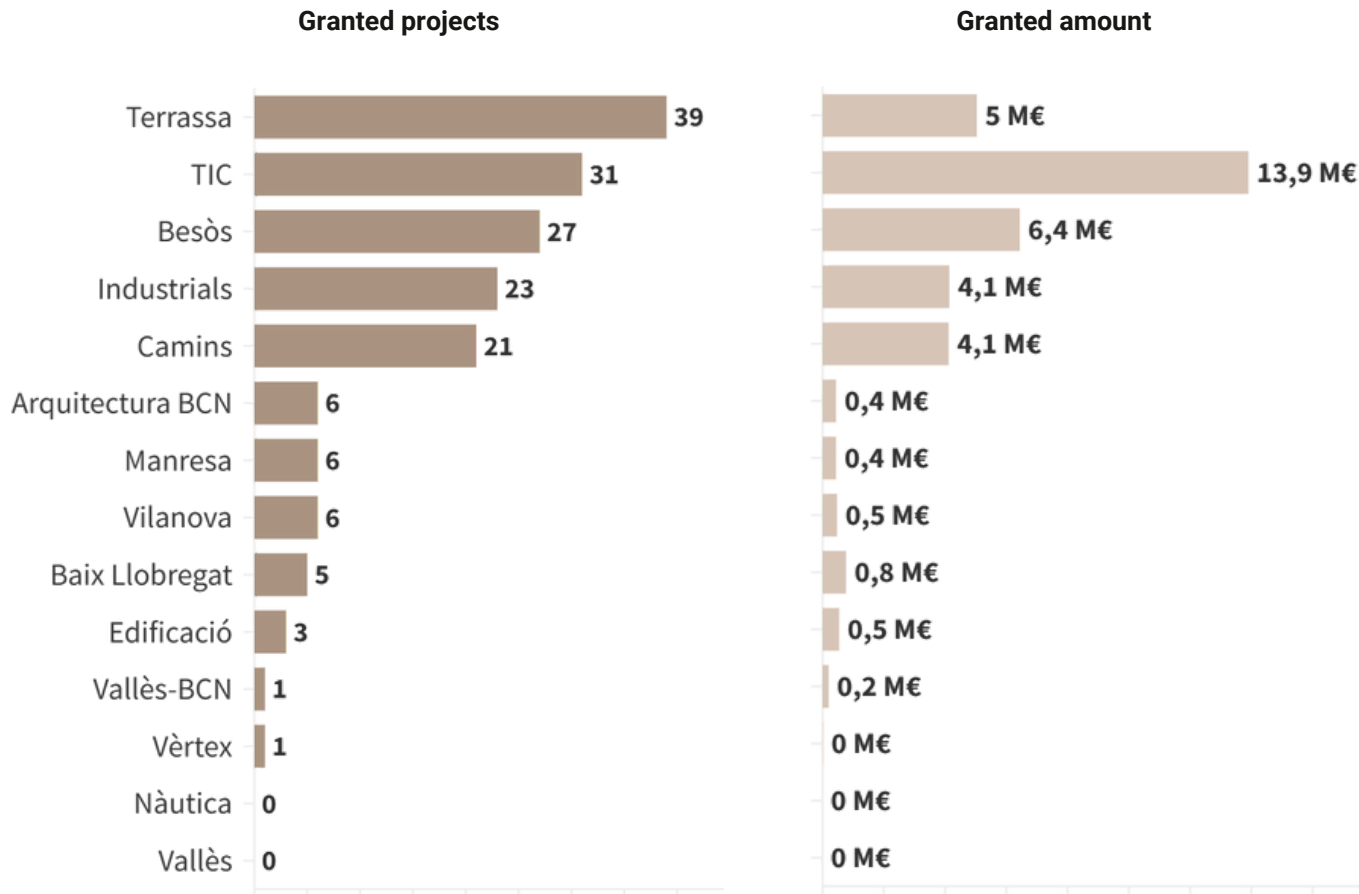
Proposals submitted

409



National projects

Contract revenue by UTG



* Includes calls for 2023 for which the decision was issued in 2024. Similarly, decisions are pending on calls in 2024.

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Terrassa received funding in 39 national, autonomous community and local competitive projects. It was followed by ICT with 31 and Besòs with 27.

ICT projects received subsidies in calls for proposals for a total amount of 13.9 million euros.

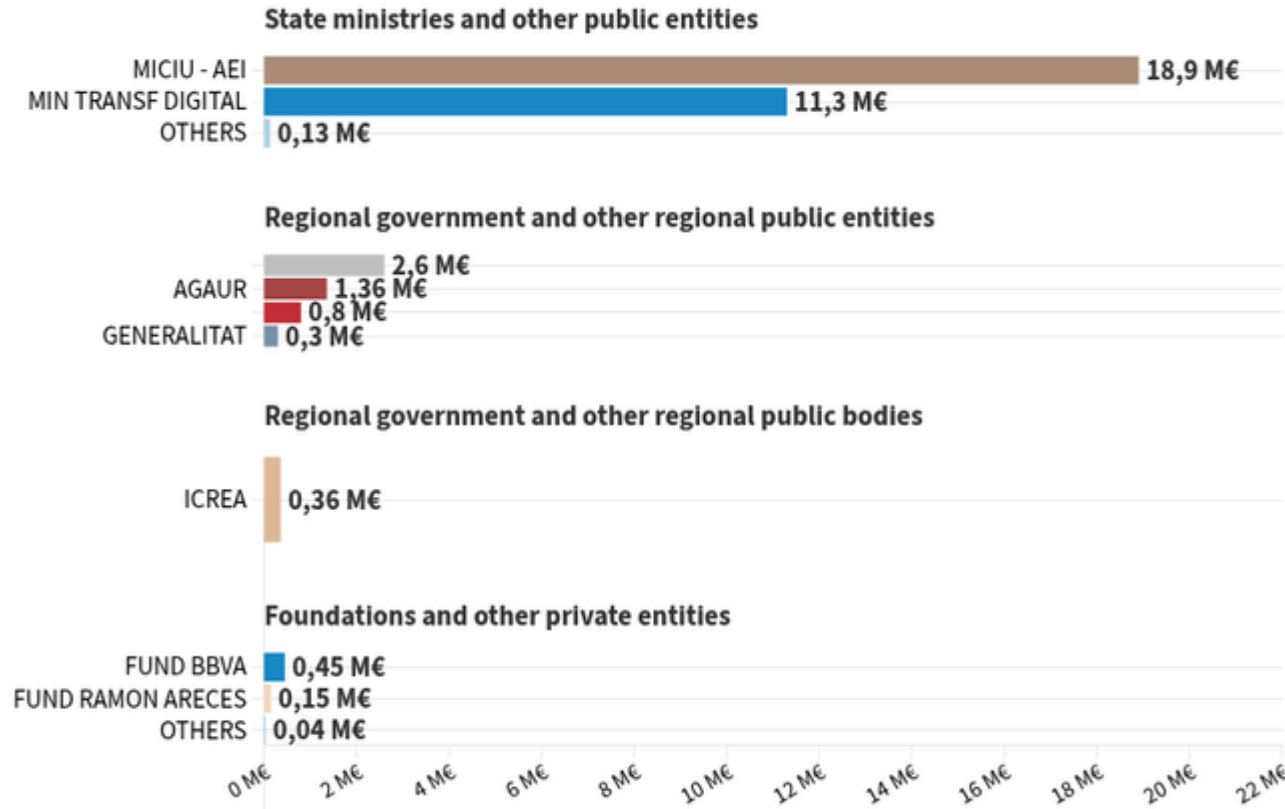
Awarded projects

169



National projects

Fundraising by funding body



Funding for national projects came mainly from national public entities, with a subsidy of 30.3 million euros.

The UPC will also receive 5.12 million euros in funding from public entities in the autonomous community and 1 million euros from foundations and other private entities.

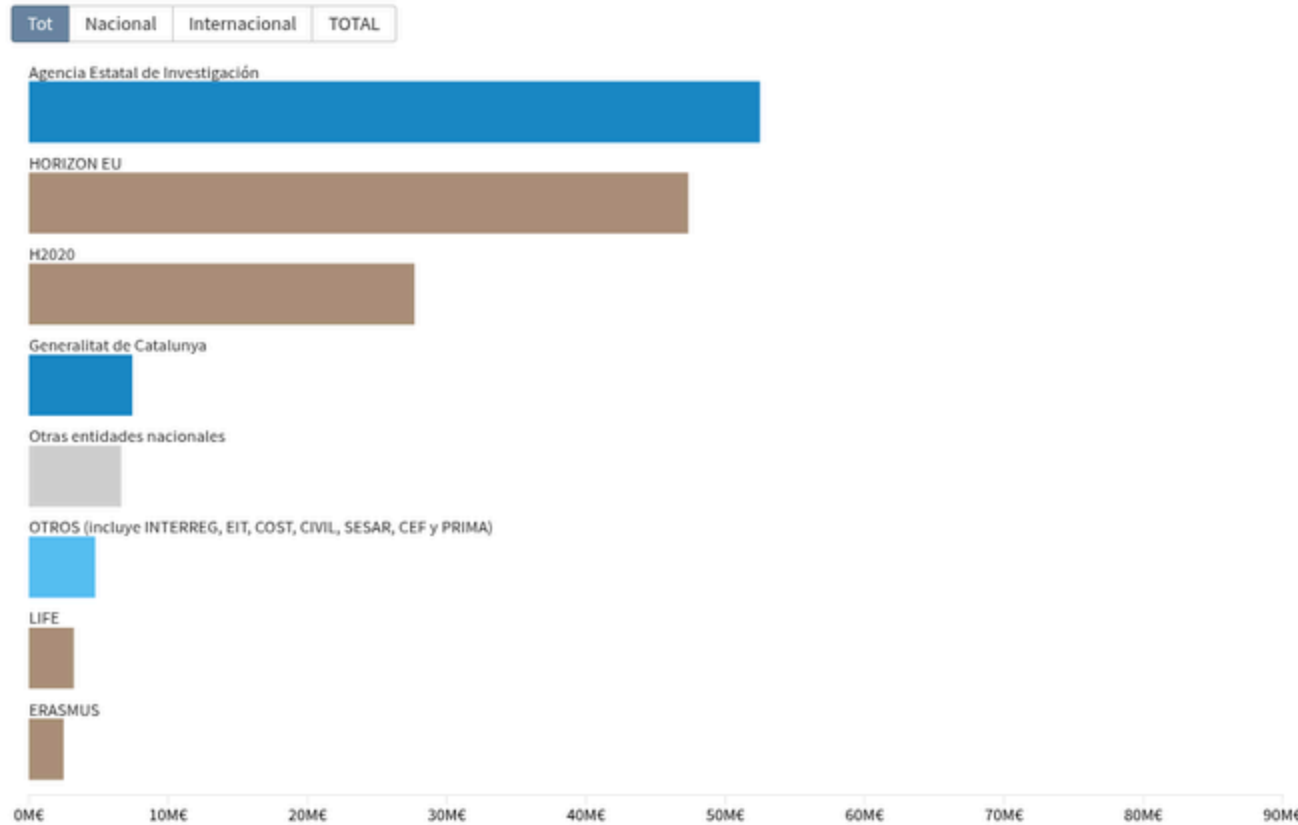
Award amount
€36.5 m

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Economic management

Reporting



A total of 781 projects were reported, totalling 150.22 million euros.

Specifically, 556 national projects were reported for a total value of 66.52 million euros, and 228 international projects for a total value of 85.51 million euros.

Total reported amount

€150.2 m



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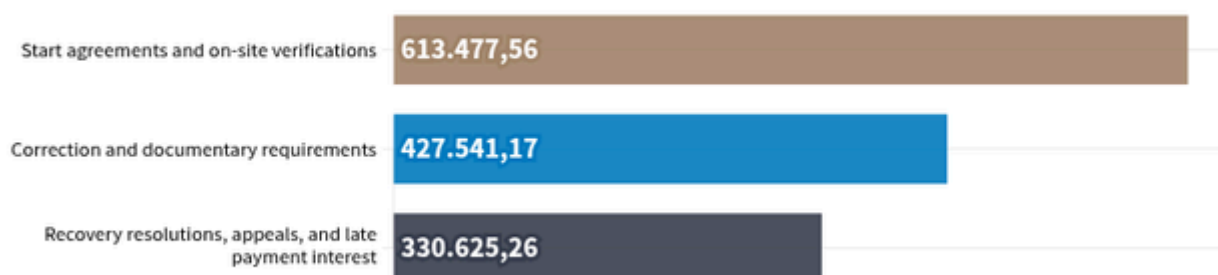
Economic management

Requirements of funding bodies

Number of requirements



Amount of requirements



Once reporting on research projects has been completed, the funding bodies initiate verification and information requirement processes to approve the certified costs.

In 2024, a total of 242 requests of various kinds (corrigenda, initial agreement, for documents, repayments, etc.) were received for a total amount of 1.37 million euros.

Total requirements

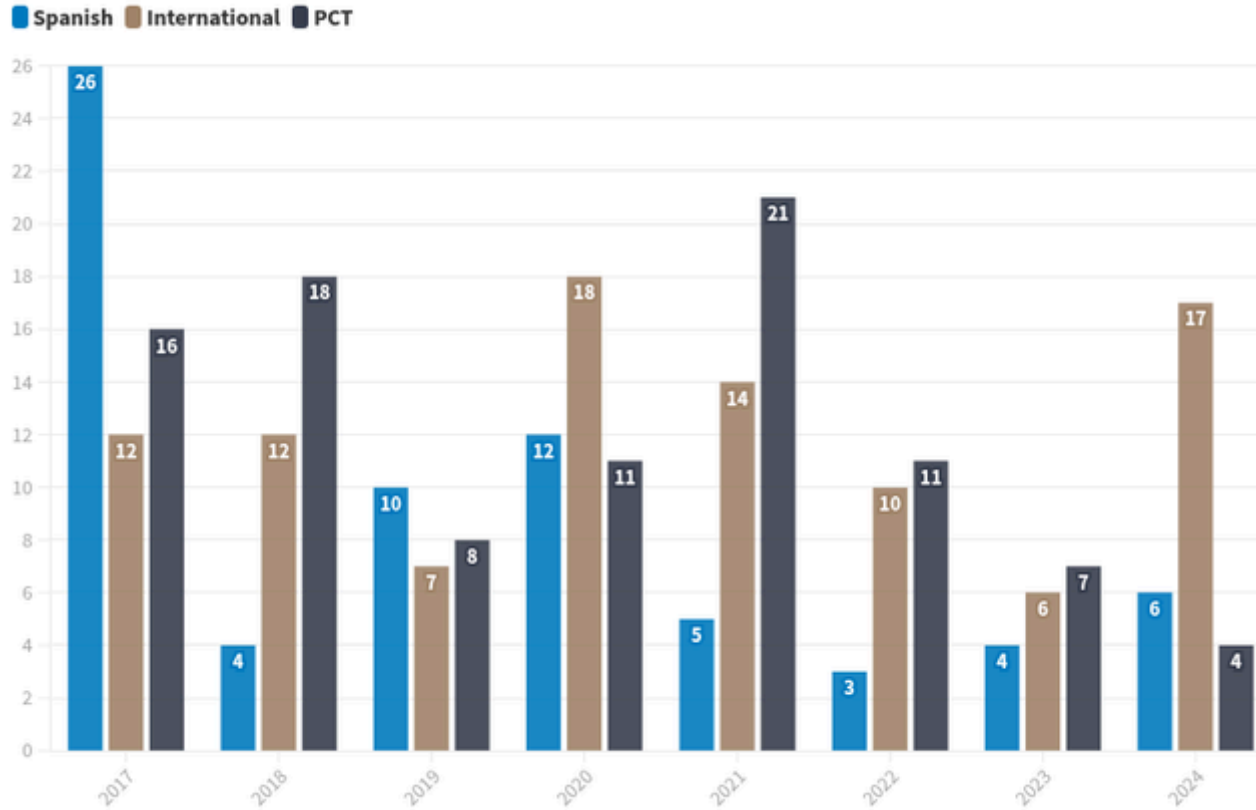
242



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Priority patents

23 priority patents, 6 of which were Spanish



A total of 23 priority patents, 6 more than the previous year, were applied for; of them, 17 were international and 6 were Spanish.

A total of 4 patents were extended through an application for an international patent extension (PCT).

Priority patents

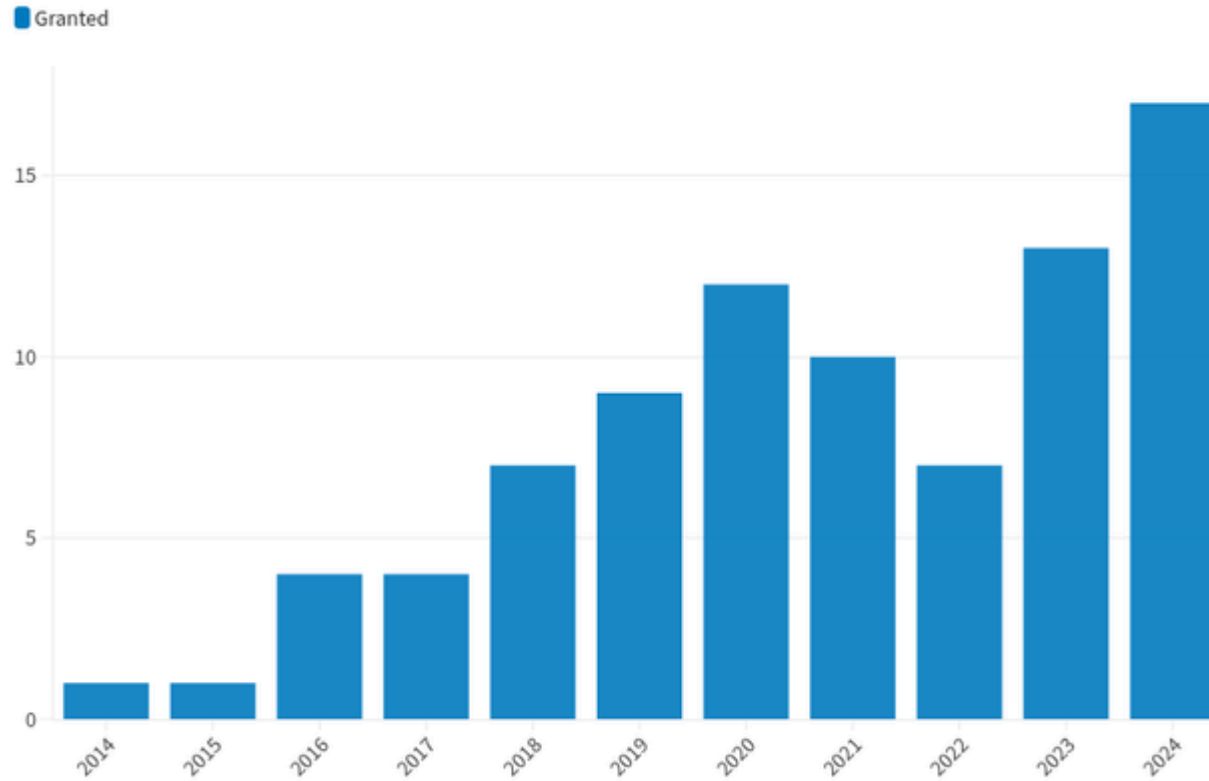
23



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European patents

17 patents granted by the EPO



Thanks to the policy applied at the UPC since the new Spanish patent law came into force in April 2017, a favourable evolution in patent grants at the EPO can be observed.

In 2024, 17 new European patent applications were validated, a figure that places the UPC among the top 10 bodies (and the top university in Spain) in European patent applications.

Patents awarded by the EPO

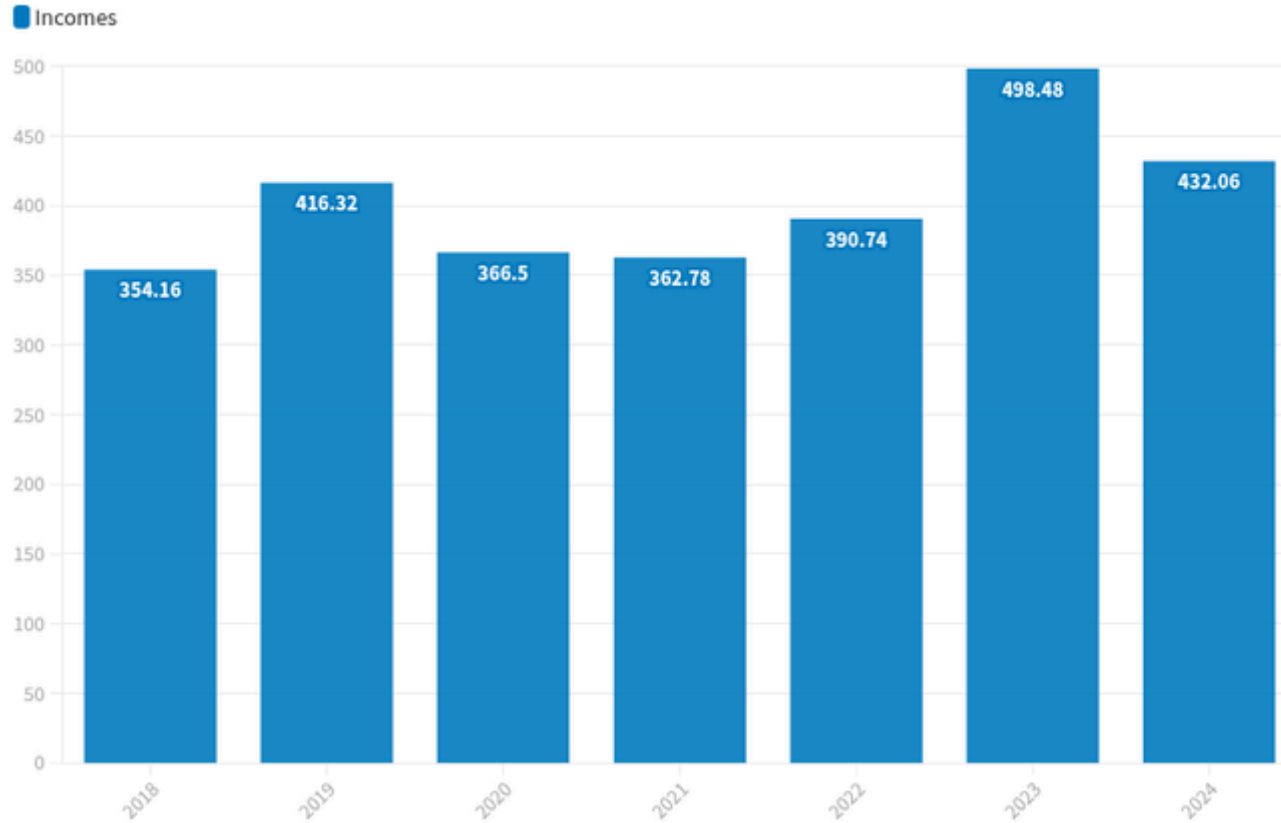
17



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Royalties

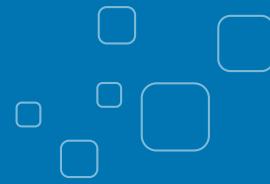
Evolution of royalty revenue from licences granted to third parties and spin-offs



Return of royalties and transfers resulting from signed licensing agreements: the turnover was €432,062 in total.

Royalties in 2024

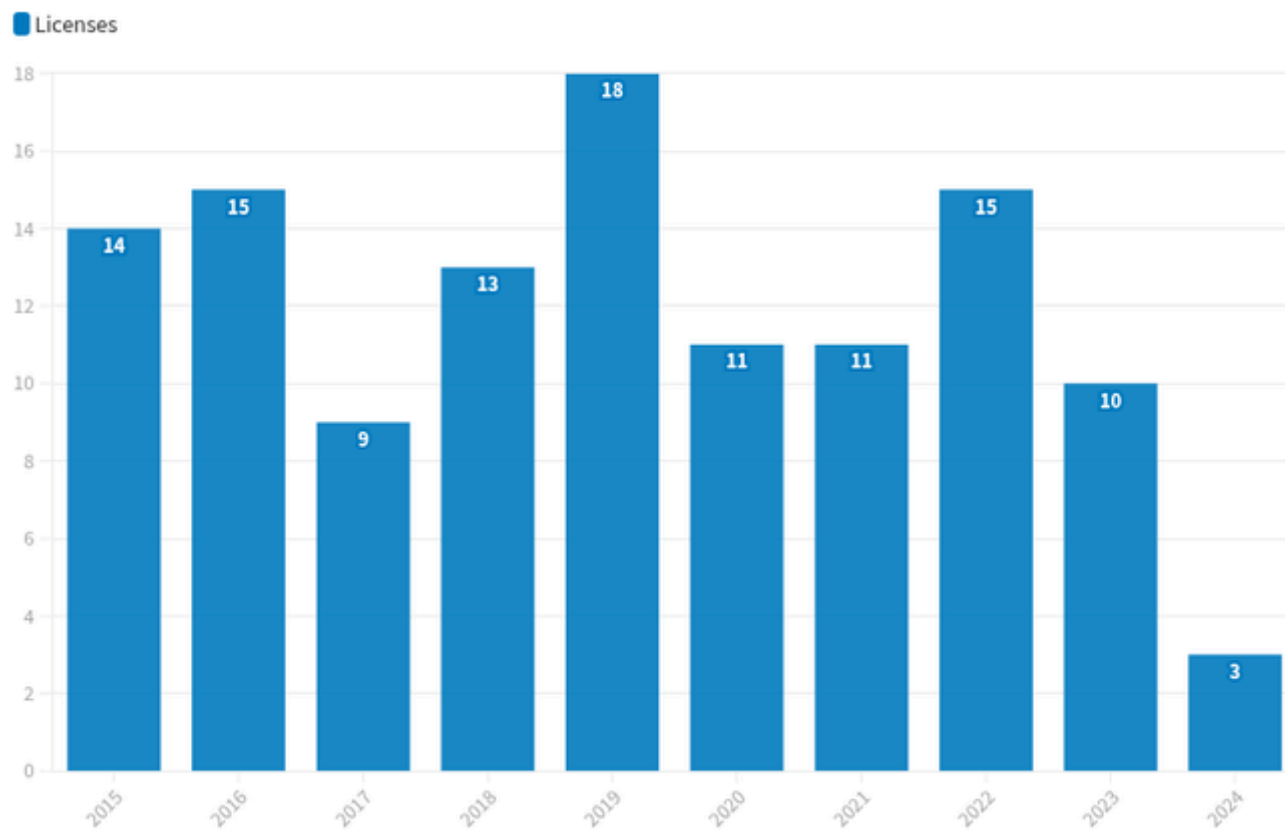
€432,062



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Licences

Evolution of new licences granted



3 software licences were signed.

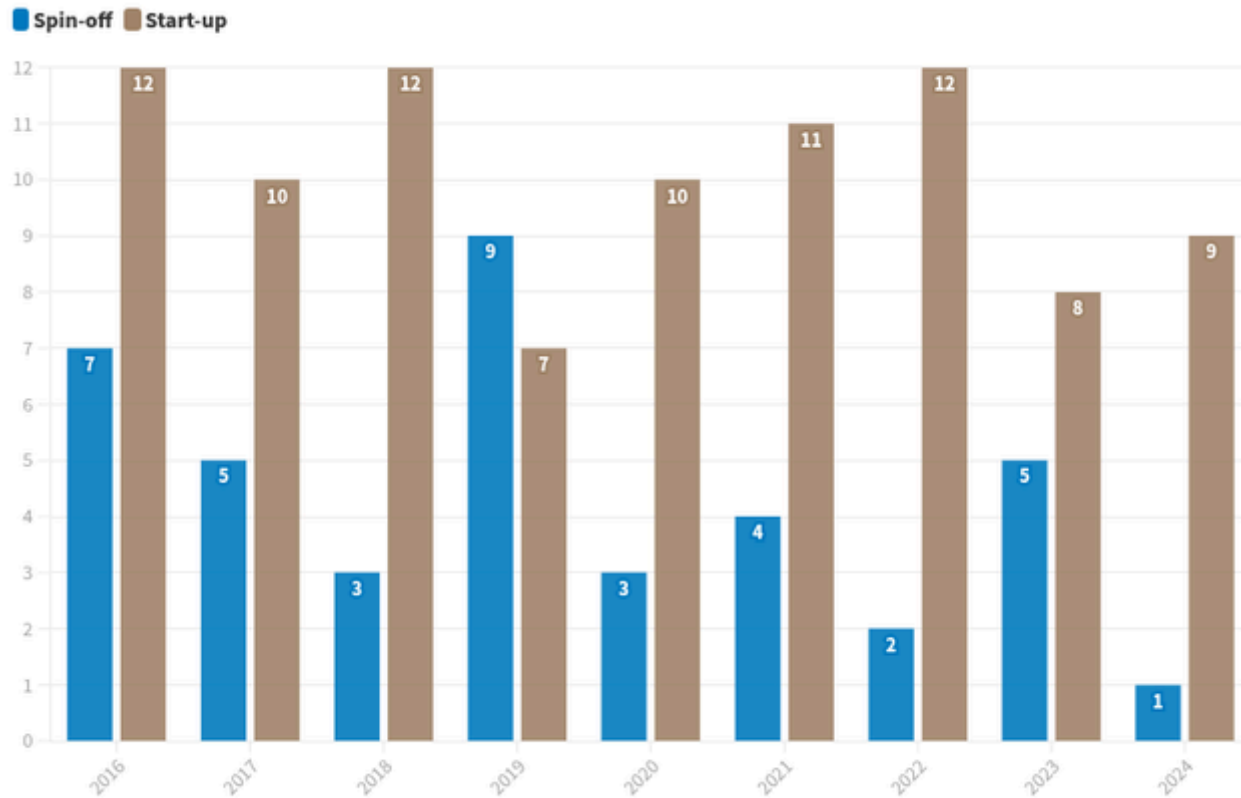
New licence contracts in 2024

3

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Technology-based companies (TBCs)

The UPC maintained an active portfolio on the creation of spin-offs and start-ups



The UPC continued to advise start-ups and promote entrepreneurship days, pre-accelerator programmes and the participation of TBCs in events such as 4YFN, the Barcelona Deep Tech Summit and the Smart City Expo World Congress.

10 TBCs, 9 start-ups and 1 spin-off were created in 2024.

TBCs created in 2024

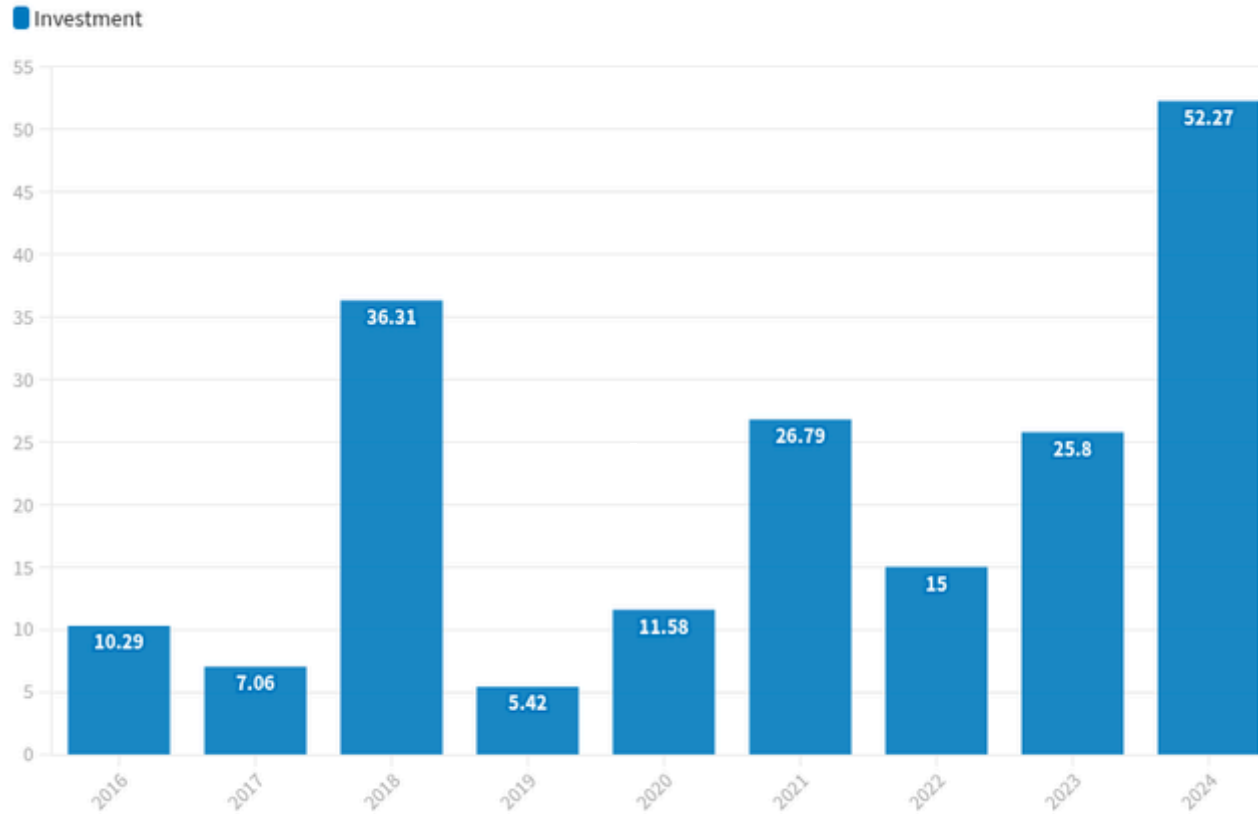
10

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Investment mobilised

Evolution of the mobilisation of capital by TBCs



In 2023, technology-based companies (spin-offs and start-ups) advised by the UPC raised capital in the form of private investments, participative loans and/or convertible loans and grants amounting to €52.26 m.

The last three years (2022-2024) show sustained growth and a substantial increase in 2024.

Investment and grants in 2024

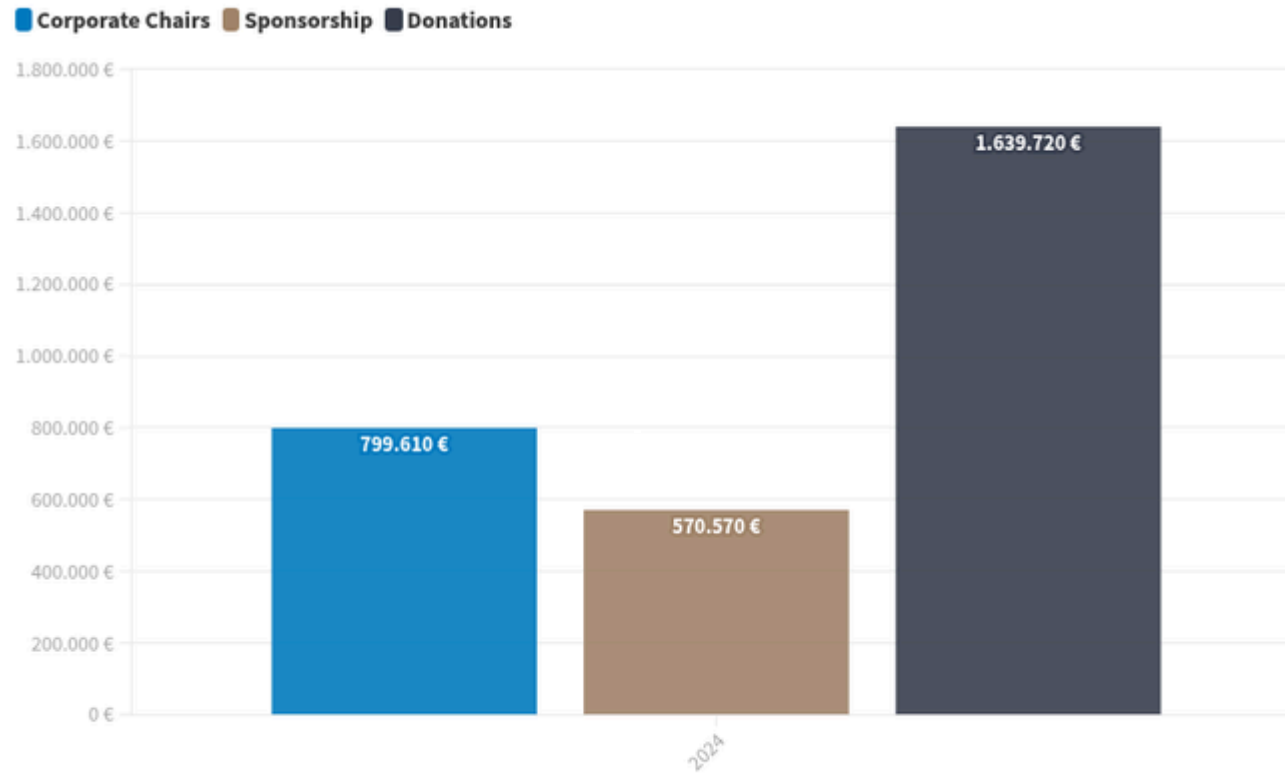
€52,267,089



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Sponsorship and patronage

Enterprise chairs, sponsorship and donations



*Donation amount (includes general interest agreements)

In 2024, three new enterprise chairs were founded (more details): the RUMB Chair (Urban and Metropolitan Regeneration in the Besòs, Barcelona City Council), the TÜV-SÜD Chair and the TAIGUA Chair.

Nevertheless, donations are the main source of funding from sponsorship and patronage, amounting to 1.6 million euros in 2024.

Total funding from sponsorship and patronage

€3,009,899

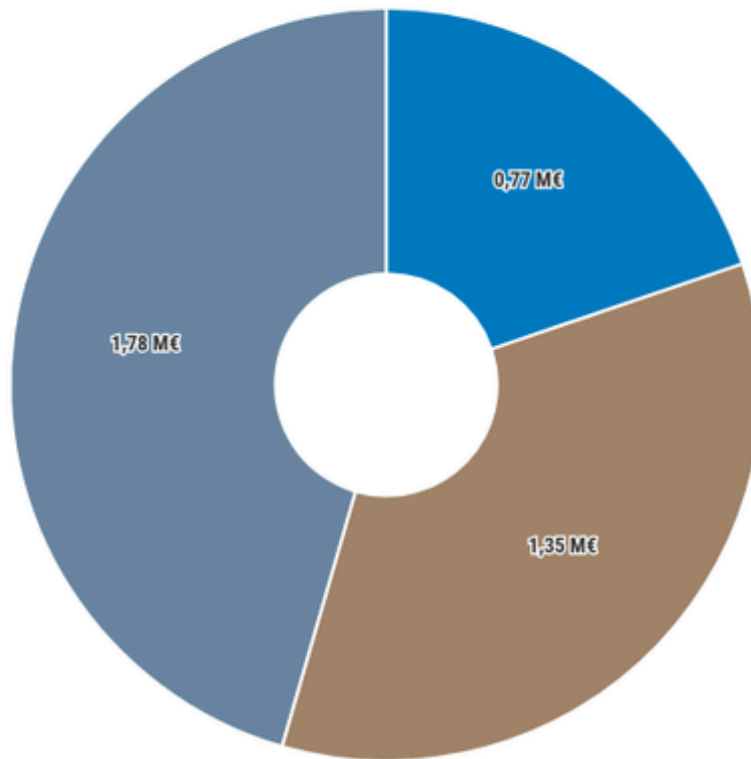


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Scientific and Technical Services

Revenue from services and infrastructure use

- Billing of internal UPC services
- Billing of services to third parties
- Billing for contracts derived from services and use of infrastructures



The Scientific and Technical Services of the UPC consolidated their activity in 2024 with actions as significant as obtaining more than 4 million euros in equipment in the infrastructure call. In economic terms, total revenue from internal and external services and contracts for the use of infrastructure was 3.9 million euros.

Revenue from services and infrastructure use

€3,904,924

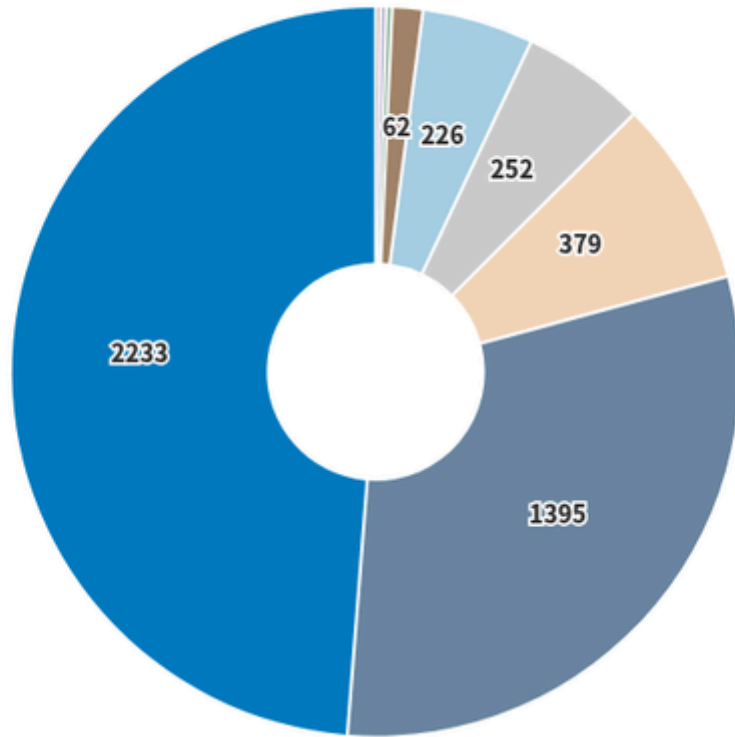
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Research output

Number of publications

■ Journal article
 ■ Book
 ■ Conference paper presentation
 ■ Book chapter
 ■ Scientific-technical document
 ■ Doctoral thesis
 ■ Exhibition catalog edition
 ■ Conference proceedings
 ■ Exhibition catalog chapter



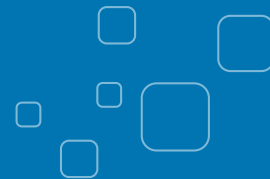
The total number of scientific publications decreased with respect to 2023 (4,876).

Only the number of doctoral theses increased, from 331 in 2023 to 379 in 2024.

Nevertheless, new publications from 2024 were still being registered as the annual report was being prepared so the total number is expected to rise slightly.

Total number of publications

4,580



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Research, Development and Innovation (RDI) Area



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