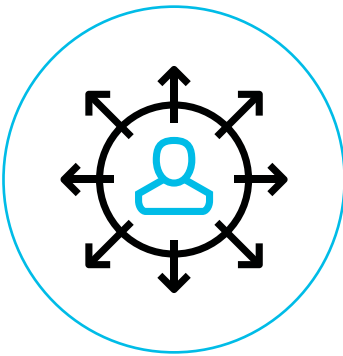


# SUSTAINABILITY CAPABILITIES

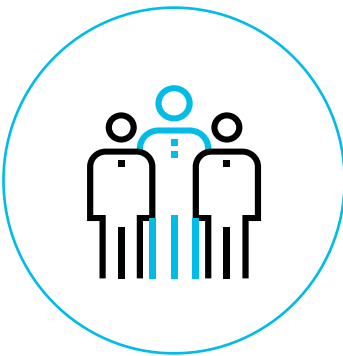
Buildings & Places

# WHERE WE ARE

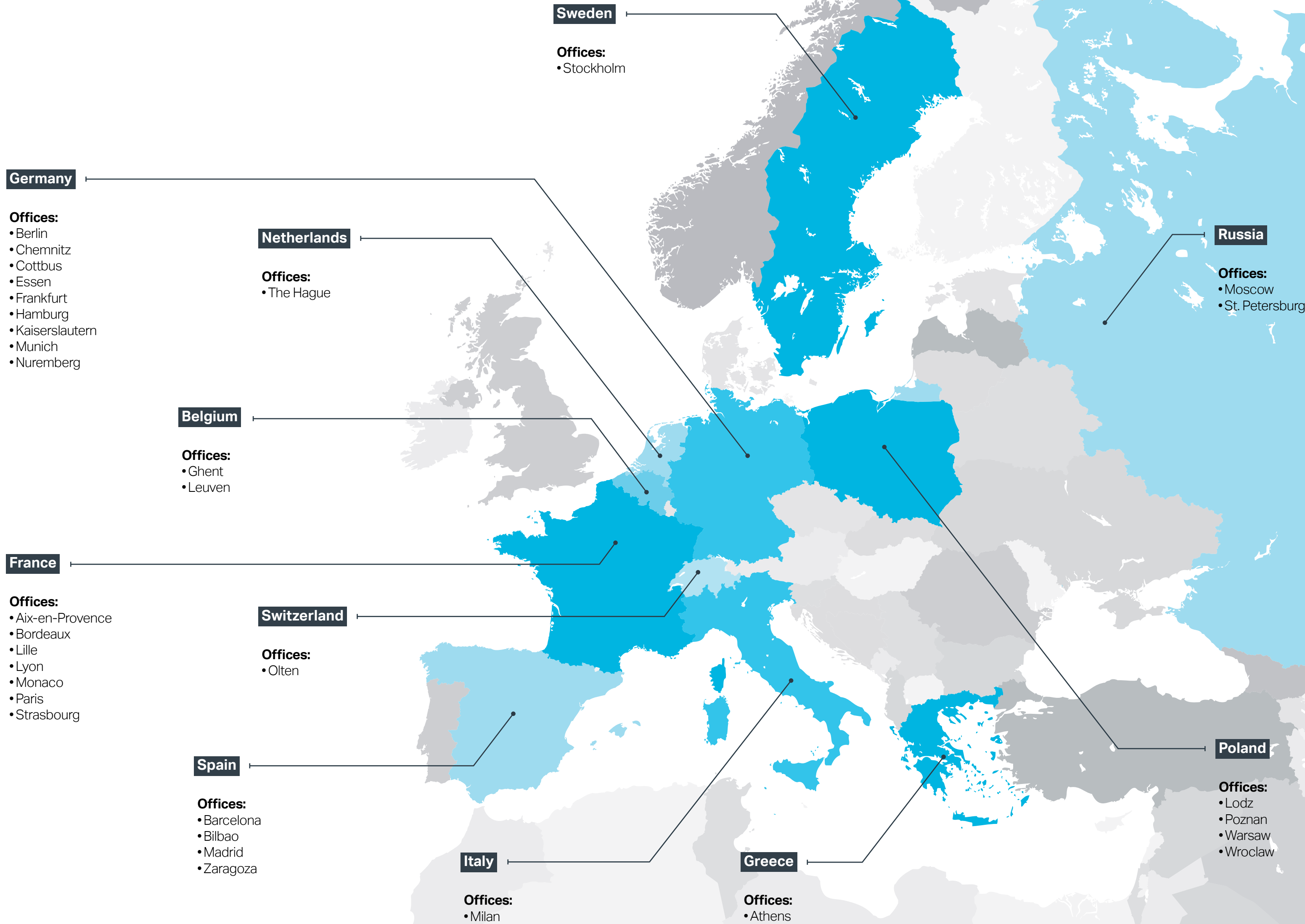
Our international presence allows us to offer specialized services with local teams, centralized and coordinated from the Madrid office.



**+10**  
Countries

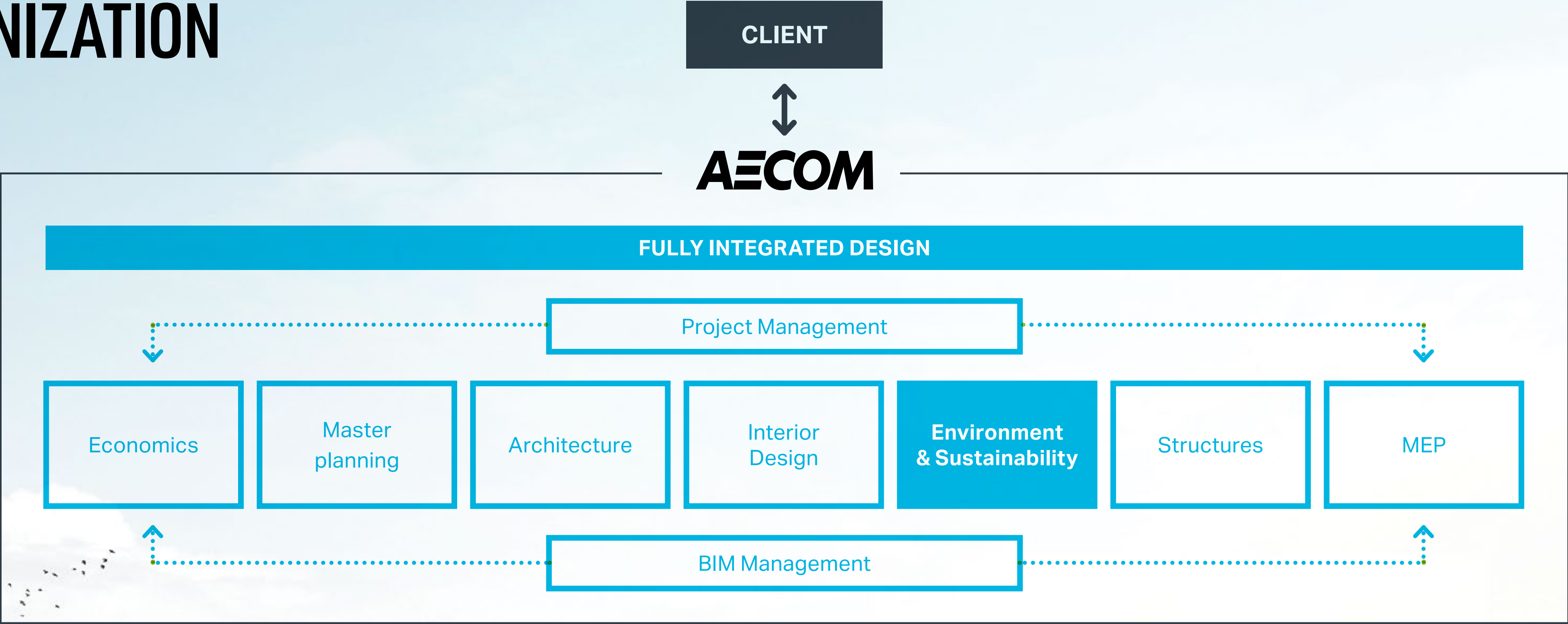


**+2,100**  
Employees

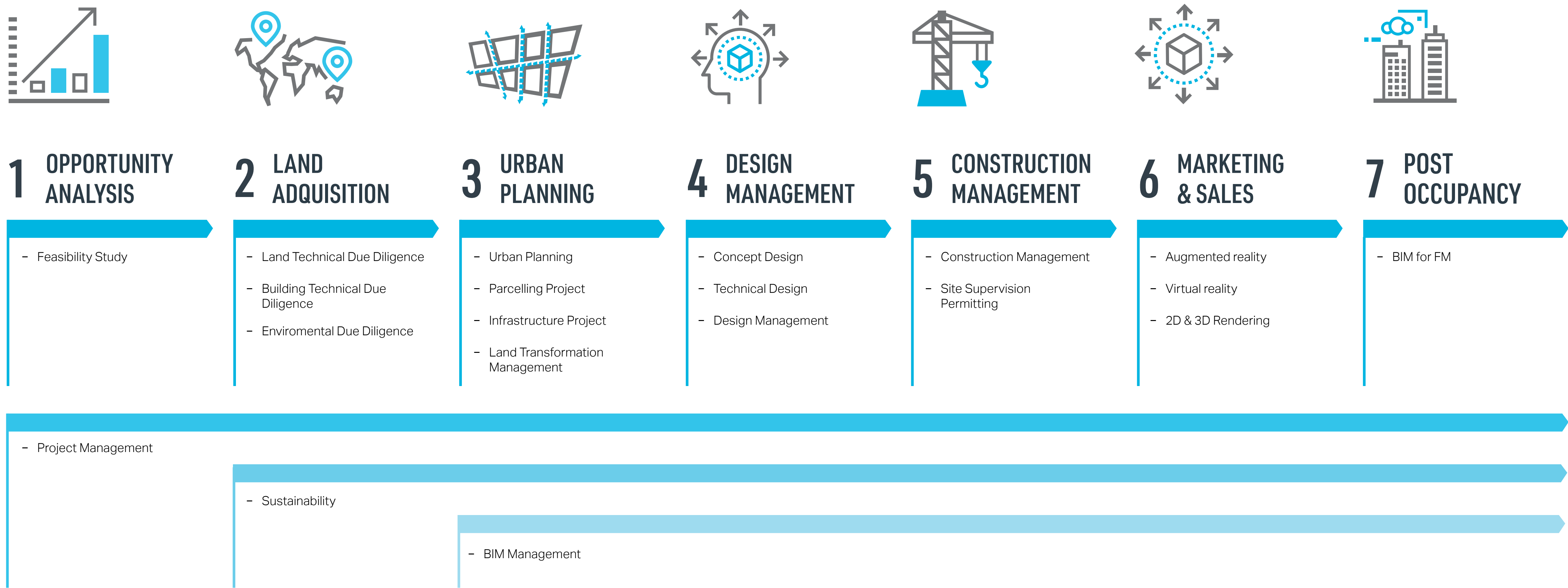




# ORGANIZATION



# SERVICES BY PROCESS





# WHAT DOES SUSTAINABILITY MEAN FOR US?

**Mission** To provide value to our clients by increasing profitability or reducing risks in the management of their projects and assets, throughout their entire life cycle, through specialized and innovative services.

**Vision** To be a relevant national and international actor in the sector of professional consultancy, management and sustainability services in the real estate and infrastructure sectors.

## ENGAGEMENT

We should preserve and protect the places where we live. Change is inevitable and we need to adapt, but in doing so, we will not compromise our core values. We should not waste resources, nor should we damage the environment willfully. We should be conscious of our actions and the impacts these may have on the welfare of others so that livability applies to everyone.

## RESILIENCY

It is the ability to withstand shocks (like typhoons and earthquakes) and stresses (like poverty and pollution), and to bounce back again stronger after the event. This is what builds sustainable communities.

## FUTURE- PROOFING OUR ASSETS

But with forces like climate change assailing our cities, we must future-proof our assets to withstand greater trials against nature. We should also consider our human assets. With a growing elderly population, we need to be thinking about reconfiguring our living places for accessibility and active aging.





# SUSTAINABILITY IS IN ALL THAT WE DO

AECOM has world-class capability in advanced building simulation and design. Combined with our reputation for detailed engineering, this delivers sustainable buildings that work and last.



## ADD VALUE

To clients' projects by embedding sustainability into all of our projects —which is where we can make the most positive and powerful impacts.



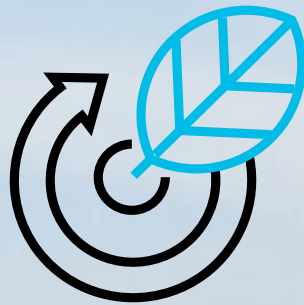
## CONTRIBUTE

More widely on developing the sustainability agenda by providing industry leadership, transformational projects, and our supply chain.



## ENGAGEMENT

With our employees, suppliers and local communities in our own operations and practice.



## REFLECT THE NEEDS

Of our clients by developing new sustainability services that suit their business needs



## INVEST

In our employees to ensure they have the necessary skills to understand sustainability and deliver sustainable projects.



# OUR CORE SERVICES

Environment and the Sustainability are essential in our designs. We firmly believe in setting the stage for change toward differentiation.

## ENVIRONMENT

Healthy societies depend on physical and social infrastructure to advance economic opportunity, protect our environment and improve people's lives. That is why we provide the following services:

- Soil and groundwater studies
- Decommissioning and demolition
- Impact assessment and strategic environmental assessment
- Surface water resources
- Risk assessment
- Due diligence and EHS audit
- Acoustics and Air quality
- Marine
- Brownfield redevelopment

## SUSTAINABILITY

AECOM has extensive experience in sustainability assessments, consultancy and studies. This extensive experience has been built up from our early work on the development of best practice tools and the creation and management of sustainability implementation plans.

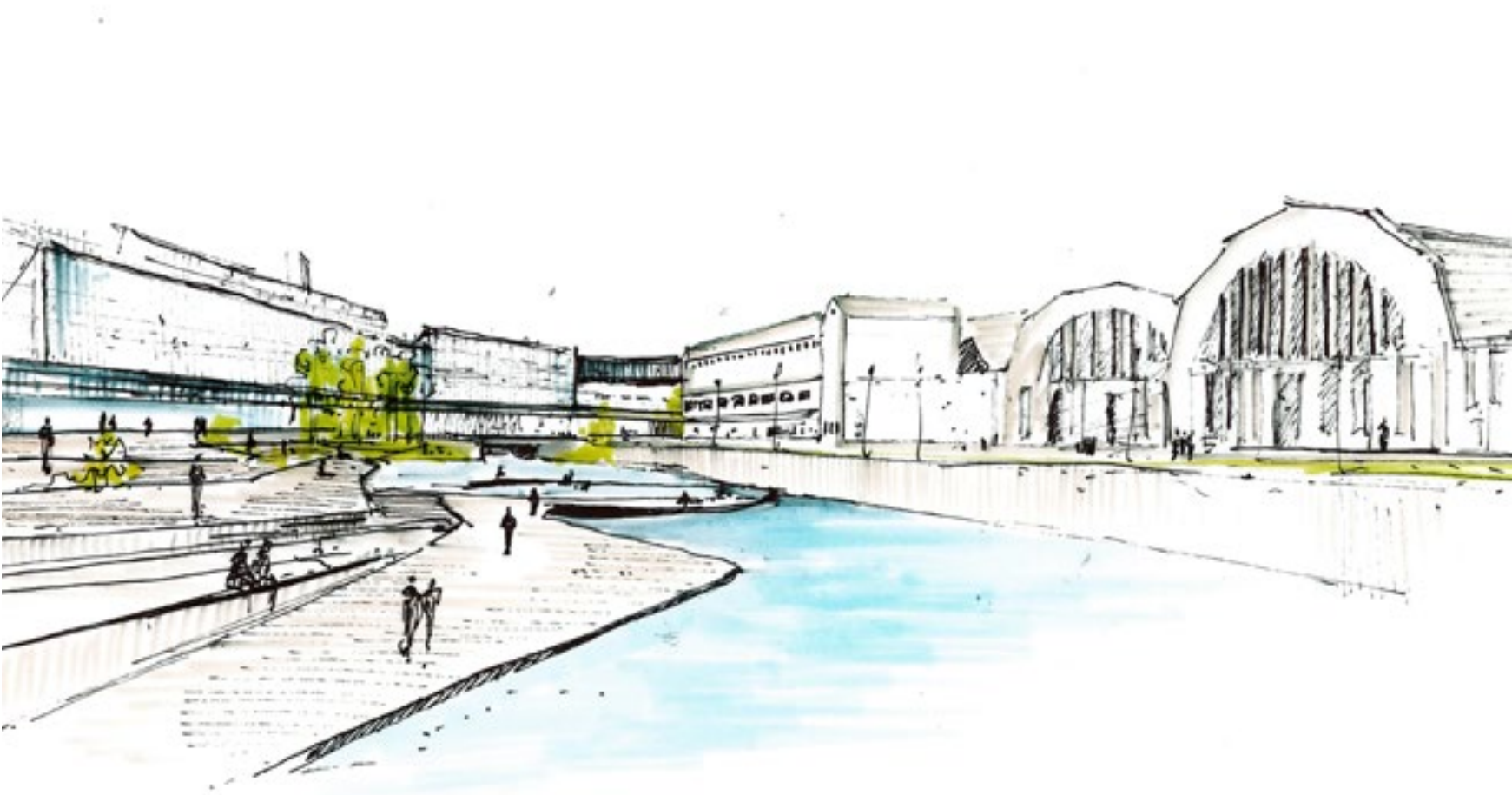
Our competitive advantage is that we are at the forefront of the delivery of all aspects of sustainability in the built environment. We implement sustainable measures from the very beginning, which includes:

- Bioclimatic Architecture
- Sustainability based feasibility studies and assessments
- Ecological studies
- Life Cycle Analysis for buildings and products
- Carbon and Water footprint
- Life cycle assessment
- Circular Economy based projects and initiatives
- Landscaping and xeriscaping
- Products and materials advisory
- Writing of reference frameworks and sustainability white papers for buildings

## GREEN BIM

We seek to innovate and deliver solutions that are resilient to a dynamic and unpredictable world whilst we reduce pollution and conserve resources.

That is why our Sustainability Team uses BIM in collaboration with architects, designers and engineers. This synergy gives us the opportunity to always be with the latest update, and generates high quality models and outputs to our clients.





# OUR CORE SERVICES

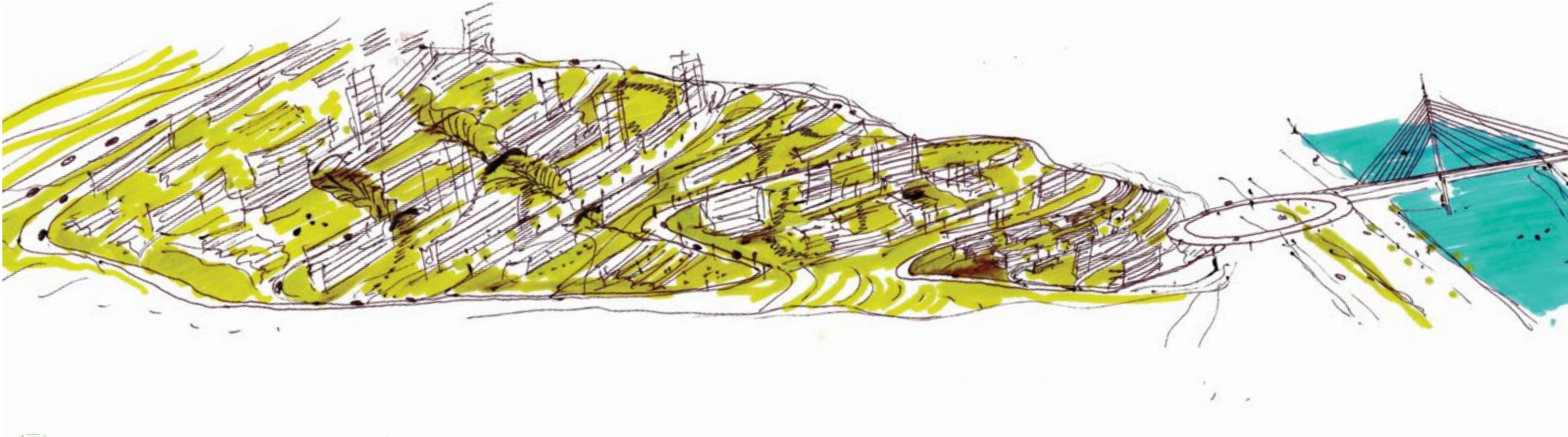
As part of our Sustainability Services we rely on market driven, market change third party verified standards and globally reknown.













## ENVIRONMENTAL ASSESSMENT TOOLS

A very important way to deliver success through sustainability assessment is through the use of internationally recognized quality Tools for Green Buildings. These tools, also known as certifications, are crucial for the long-term success of the real estate and the investment.

Each certification system provides criteria that gives a holistic view of the project and cross-cutting issues that can be addressed with our integrative approach. A sustainable based certification can contribute towards healthier environments and ecosystems for living and working, simultaneously driving down operating costs while increasing the lifetime value of the building and its assets.

There are many sustainability rating systems and certifications in the world today, a few of which are recognized internationally. Our expertise covers but is not limited to the following:



	BREEAM		ENVISION
	LEED		GSAS
	WELL		RELI
	PASSIVE HOUSE		TRUE
	VERDE		SITES
	EDGE		LEVELS



# WHY AECOM?

For the last four years, we have been named one of Fortune’s World’s Most Admired Companies.

## CORE SUSTAINABILITY VALUE

AECOM is a global network of design, engineering, construction and management professionals partnering with clients to imagine and deliver a better world. As a premier, fully integrated infrastructure firm, we unlock opportunities, protect our environment and improve people’s lives.

In AECOM we are very aware of the great impact that building has on the environment. To mitigate its impact we developed methods or systems of environmental quality assessment in order to manage, qualify and quantify different measures or systems to improve the behavior of the building in terms of sustainability.

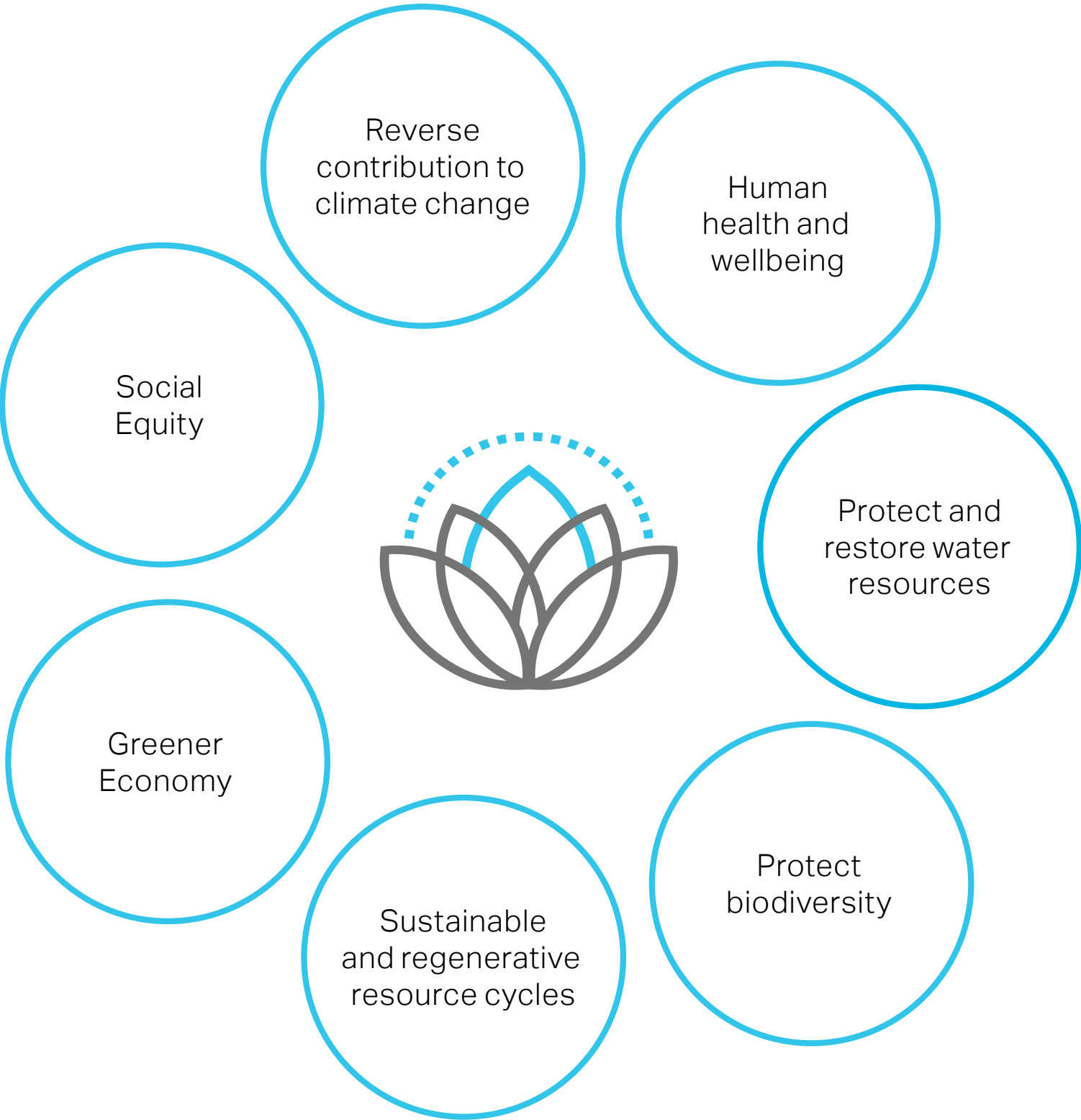
As experts, we focus on the global benefits of sustainability that we will achieve with the project and choose the system that best suits our client.

## SAFETY, HEALTH AND ENVIRONMENT

AECOM is committed to exceptional levels of performance in safeguarding our people and the environment as one of our Core Values along with Sustainability in our designs.

Keeping our people safe is our most important measure of success. We strive to be the beacon of safety excellence in the industry and for the communities which we work with.

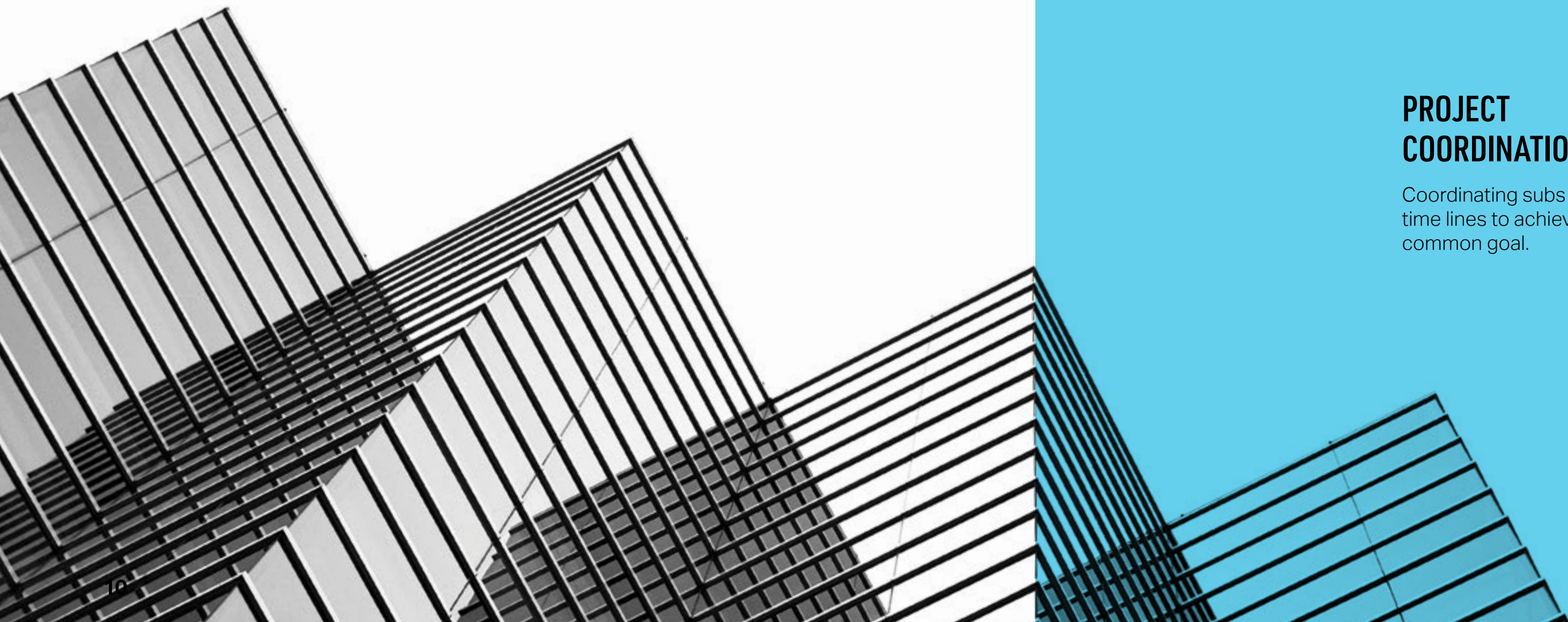
As safety is a core value and a key to our success, we demand continuous improvement in our journey toward a “zero” incident culture, where everyone is committed to safety, health and environmental excellence.





# HOW WE HELP CLIENTS

We will help define your sustainability objectives and assess the feasibility of certification for your building. Our experts work alongside your team to explore alternative means of meeting objectives, budget constraints and certification requirements.





# SUSTAINABLE ARCHITECTURAL DESIGN

Designing sustainable buildings calls for a thorough understanding of local cultures and environments, quality standards, environmental regulations, safety standards and building codes.

AECOM seeks to minimize the negative environmental impact of buildings in all of its designs. We achieve this goal by efficiency and moderation in the use of materials, energy, and development.

Our idea of sustainability, or ecological design, is to ensure people well-being and save resources for our planet.

Thanks to this thought, we have become a reference in the three pillars of sustainable development:

- Economic
- Social
- Environment





# GREEN BIM

We achieve a significant differentiation within the market through the use of BIM technology in our projects. This innovative tool advances Sustainability, improves communication and streamlined delivery.

## WHY?

The growing demand of sustainable buildings closely bound to an effort of making BIM mandatory in the forthcoming years, seems to be creating an unquestionable relationship between this two concepts. Yet the inherent power of BIM is its potential contribution to the design, construction and commissioning of buildings with lower environmental impacts, whether this is in the form of energy-efficiency, the cutting of carbon or for better use of fewer materials. One of the key cutting-edge concepts integrated in Architecture: Circular Economy.

One of the proven core values that the sustainability team of AECOM Spain delivers is the ability of integrating the added value of the sustainability to the growing use of the complex technique of BIM methodologies.

## HOW?

Our team is developing an Environmental Assessment Method, based on different analyzes and methodologies. Following this purpose, we use several softwares such as:

- Revit
- Ecotec
- IES Virtual Building
- Green Building Studio
- EnergyPlus
- Dynamo
- Navisworks
- Presto
- Insight

## WHAT DO WE DELIVER?

BIM gives access to automatically calculated and current design data useful for environmental and heat-loss analysis, such as floor and surface areas and building volumes. Building optimized orientation

- Building massing: an accurate analysis of the building and its envelope
- Energy Use
- Daylighting
- Acoustics
- Material delivery
- Adequate use of resources
- Life Cycle Approach
- BIM 6D and 7D
- Schedules and cost estimate
- Data bases
- Simulations



# ENVIRONMENTAL ASSESSMENT TOOLS

Selecting measures to reduce the overall environmental impact associated with building design and construction can be a difficult task, and a systematic approach is needed.

Sustainability certifications are generally third party assessments of project or products where the certifying organization evaluates against a number of specific agreed upon standards. Often these certifications are weighed by customers when comparing their product choices and options.

A number of these accreditations focus on the triple bottom line; looking at environmental quality, social quality, and economic prosperity. There are wide ranges of certification options that cover a number of varying products including wood, vehicles, buildings, power, and general consumer products.





# ENVIRONMENTAL ASSESSMENT TOOLS

Sustainability standards and certifications are voluntary, usually third party-assessed, norms and standards relating to environmental, social, ethical and safety issues.

## CERTIFICATION BENEFITS

- Market differentiation, high-end, high-quality positioning.
  - Compliance with local authority requirements.
  - Meeting sustainability objectives.
  - Construction and operational resource efficiencies.
  - Improved comfort levels, retention of occupiers.
  - Benchmarking of assets.
  - Education and awareness raising.
  - Environmental Assessment Method.
  - Certification Process.
  - Voluntary.
  - Independent and credible.
- Based on a rating system (%).
  - Efficient and responsible use of resources (energy, water and materials).
  - Improved environmental air quality for indoor and outdoor spaces.
  - Improved operation and maintenance of our buildings.
  - Demonstrate the corporate and environmental responsibility policy of organizations.
  - Improve the functionality, flexibility and durability of buildings.
  - Increase the satisfaction of building users
  - Independent third party confirmation of the environmental impact of asset and/or management systems.
  - Annual Certificate renewals to reflect current practices and encourage improvement.







AECOM is today recognized internationally by LEED projects, with buildings certified across Europe, Middle East and Asia. AECOM LEED Accredited Professionals (APs) join design teams to deliver integrated and sustainable solutions.

AECOM globally has certified more than 60 projects and currently has over 120 on-going registered projects for a wide variety of building types and LEED schemes. AECOM experts are also part of design teams for numerous other projects seeking LEED certification.

We collaborate with AECOM specialists around the world, including rainwater/ grey water experts, ecologists, acoustics, building energy designers, and other experts, all of whom assist in achieving the highest possible LEED ratings.

The green building certification system referred to as LEED® (Leadership in Energy and Environmental Design) is a framework for identifying, implementing and measuring green building design, construction, operations and maintenance. LEED® is a voluntary, internationally market-driven, consensus based tool that serves as a guideline and assessment mechanism. This certification system has been developed by the U.S. Green Building Council- USGBC, coordinated and supervised by the Green Building Certification Institute-GBCI- and it is in constant development.

Among the different rating systems of LEED certification is LEED for New Construction version 4 (LEED NC v4), which comprises a certification system for sustainable buildings that has been designed to guide and distinguish highly efficient and sustainable buildings. The green building certification LEED-NC v4 provides a comprehensive framework to evaluate the efficiency of the building and to achieve the goals of sustainability. In order to get this, the application of sustainable criteria in the architectural and technical facilities design phases, in the construction phase, the implementation and the use of the building are taken into account.

The LEED NC v4 rating system is applied in the following different categories:

- Integrative Process
- Location and transportation
- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Innovation
- Regional Priority



- **BD+C (New Construction, Core&Shell)**
- **ID+C (Commercial interiors, Retail and Hospitality)**
- **O+M (EBOM - Existing Buildings)**
- **ND (for Neighborhood)**



# BREEAM®

Clients use BREEAM to specify the sustainability performance of their buildings in a way that is quick, comprehensive and highly visible in the marketplace and provides a level playing field.

BREEAM seeks to minimize the adverse effects of new buildings on the environment at global and local scales, whilst promoting healthy indoor conditions for the occupants.

AECOM capabilities span the full breath of sustainability services from being thought leaders in the field, to the incorporation of sustainability into our designs. Our competitive advantage is that we are at the forefront of the delivery of all aspects of sustainability to the built environment.

AECOM is a leading BREEAM assessor. We co-developed, in collaboration with BRE, the original BREEAM scheme in 1990 and have assessed more than 600 buildings since the launch of the scheme. AECOM has extensive experience in sustainability assessments, including the delivery of over 250 BREEAM Excellent rated projects. This extensive experience has been built up from our early work on the development of best practice tools and the creation and management of sustainability implementation plans.

AECOM's sustainability team have experienced BREEAM Assessors and Accredited Professionals (AP).

BREEAM sets the standard for best practice in sustainable building design, construction and operation and has become one of the most comprehensive and widely recognized measures of a building's environmental performance.



**BREEAM® ES**  
el certificado de la construcción sostenible



- **New Construction**
- **Urbanism**
- **Residential**
- **International (New**
- **Construction and In-Use)**



# WELL

**WELL is the leading tool for advancing health and well-being in buildings globally. Register your office, building or other space to leverage WELL’s flexible framework for improving health and human experience through design.**

By placing people at the heart of design, construction, operations and development decisions, well can add value to real estate assets, generate savings in personnel costs and enhance human health, well-being and experience.

WELL provides a framework for project teams to incorporate a variety of strategies to integrate human health and well-being at the heart of building design, construction and operations.

WELL also allows project teams to innovate and transform the way humans can interact with the buildings and spaces they experience. WELL allows people to connect with buildings.

The well building standard is designed to complement and work seamlessly with green building rating systems, such as LEED®, living building challenge, three star, green star and BREEAM. Existing green building rating systems offer a higher baseline for the adoption of the well building standard. WELL empowers the creation of healthy environments for people to live, work and play, to enhance health and quality of life globally.

The well building standard can be applied across many real estate sectors. Well is also organized into project types which take into account the specific set of considerations that are unique to a particular building type or phase of construction.

Depending on the features you choose to pursue, you can earn certification at one of three levels: Silver, Gold or Platinum. We believe that buildings should be developed with people’s health and wellness at the center of design.



- **Air**
- **Water**
- **Nourishment**
- **Light**
- **Fitness**
- **Comfort**
- **Mind**



# TEAM

AECOM has a qualified team of specialists in building, construction, energy efficiency and the environment, including accredited advisors of various certifications. AECOM has acted as an accredited advisor in the certification of dozens of international projects.



### JUAN CORTÉS

Expert in Urban Design and Sustainability (BREEAM Urbanism Assessor) with more than 15 years experience. Juan has successfully directed large-scale international urban projects of different scales and types. His approach to strategic development, land use, urban planning and landscape architecture blends social, environmental and economic sustainability.



### CRISTINA ROSÓN

Sustainability team leader in Buildings and Places. LEED® AP BDC and OM, BREEAM In Use International. Along with integrative process, innovation in sustainable design and improvement through: energy efficiency and sustainability, such as LCA (Life Cycle Assessment), LCC (Life Cycle Cost), GRI reports, etc.



### ANGELICA GARCÍA

Senior Environmental & Sustainability Project Manager in the Environmental Department within the AECOM Madrid Office with more than 14 years of experience. Licensed assessor under BREEAM New Construction and Residential Schemes and BREEAM AP.



### MENCIA MARTÍNEZ

Mencía Martínez has more than 15 years of experience in the environmental and social area. Currently she works as Project Director and Manager of the Environmental Management and Sustainability area within AECOM Spain.



### RODRIGO GARCÍA

Sustainability and Senior Environmental Consultant, LEED AP BD+C, involved in international and national projects related to urban planning, linear infrastructures, airports, buildings and industry.



### LOLA ARAUJO

BIM Coordinator of the Sustainability team. Expert in sustainable and bioclimatic building design in Buildings and Places, where she develops her activity as sustainability and LEED® consultant.



### CARMEN BARBERO

BREEAM New Construction Accredited Professional, with more than twelve years of experience in Mechanical Engineering Design Area. As head of MEP's Mechanical Department, Carmen has worked in international projects, supervising the different phases of construction works and equipment installation.



### ELENA OGANDO

Urban designer with over 10 years of international experience in the design and coordination of projects of different scales, specialized in Sustainable Urban Design and Landscape Architecture, LEED GA.



# KEY PROJECTS

Following it can be found some of the most relevant projects in which AECOM Spain has been involved with an active role and leadership on sustainability consultancy (not only BREEAM, but also other international certification schemes such as: WELL, GSAS, EDGE, VERDE, LEED, etc.)



# RETAIL SPAIN

AECOM has extensive experience in retail projects, being all environmental conscious. In addition, we certified BREEAM various shopping centers in Spain.



**COMMERCIAL, FARO GUADIANA. DATA CENTER**  
Badajoz, Spain

BREEAM NC Very Good



**HOLEA SHOPPING MALL**  
Huelva, Spain

BREEAM Very Good



**COMMERCIAL, LA ZENIA**  
Alicante, Spain

BREEAM NC





# RETAIL INTERNATIONAL

With a qualified team of accredited advisors of various certifications, AECOM has acted as an accredited advisor in the certification of dozens of international retail projects and shopping centers of various scales.



**POINT MALL**  
Zagreb, Croatia

BREEAM



**SKOPJE CITY MALL**  
Skopje, Macedonia

BREEAM



**BELGRADE MALL**  
Belgrade, Serbia

BREEAM NC Very Good



**SHOPPING MALL GRODNO**  
Grodno, Belarus

BREEAM Pre-Assesment



**DELTA CITY SHOPPING MALL**  
Podgorica, Montenegro

BREEAM/EDGE



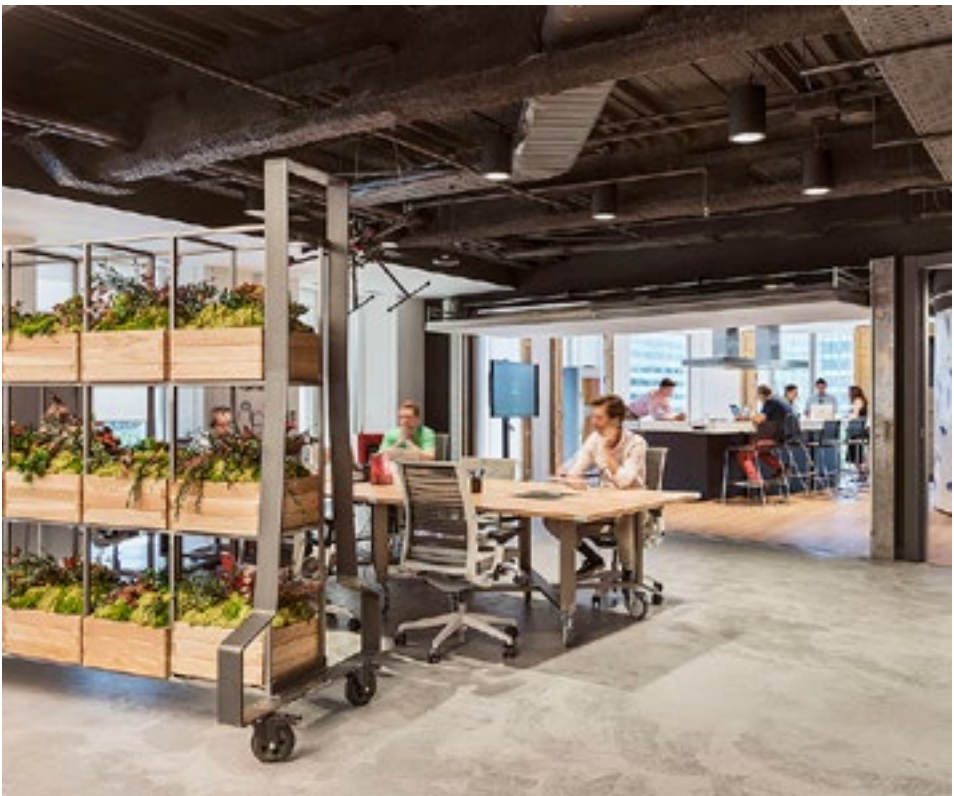
# INTERIOR DESIGN

AECOM has a qualified team of specialists in interior design. All the projects and designs follow sustainability bases, many of them certified in different rating systems.



**ACCENTURE OFFICES**  
Spain

Biophilic Design



**CITI MADRID**  
Madrid, Spain

LEED Platinum



**ACCENTURE OFFICES**  
Spain

Biophilic Design



**CITI LISBON**  
Lisbon, Portugal

LEED Gold



# OFFICES

AECOM has a large experience in office buildings, from concept to detail design. We count with several certified buildings, and also with sustainable and eco-efficient designs.



**OFFICE BUILDING JULIÁN CAMARILLO**  
Madrid, Spain

BREEAM NC Very Good



**OFFICE BUILDING VILLAVERDE**  
Madrid, Spain

BREEAM NC Very Good



**AIRBUS HEADQUARTERS**  
Madrid, Spain

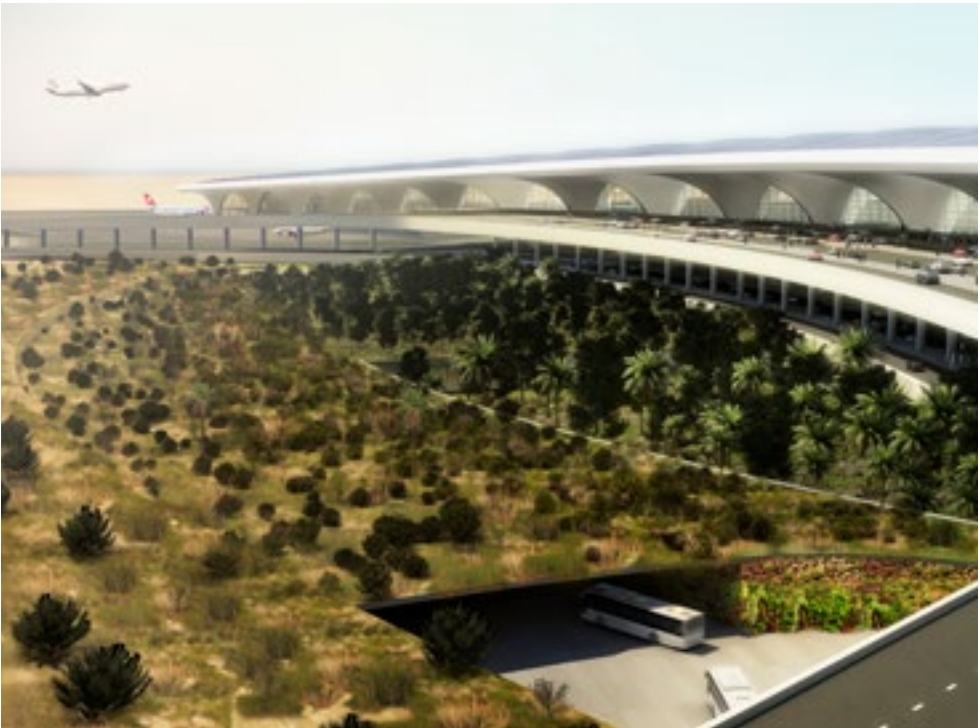
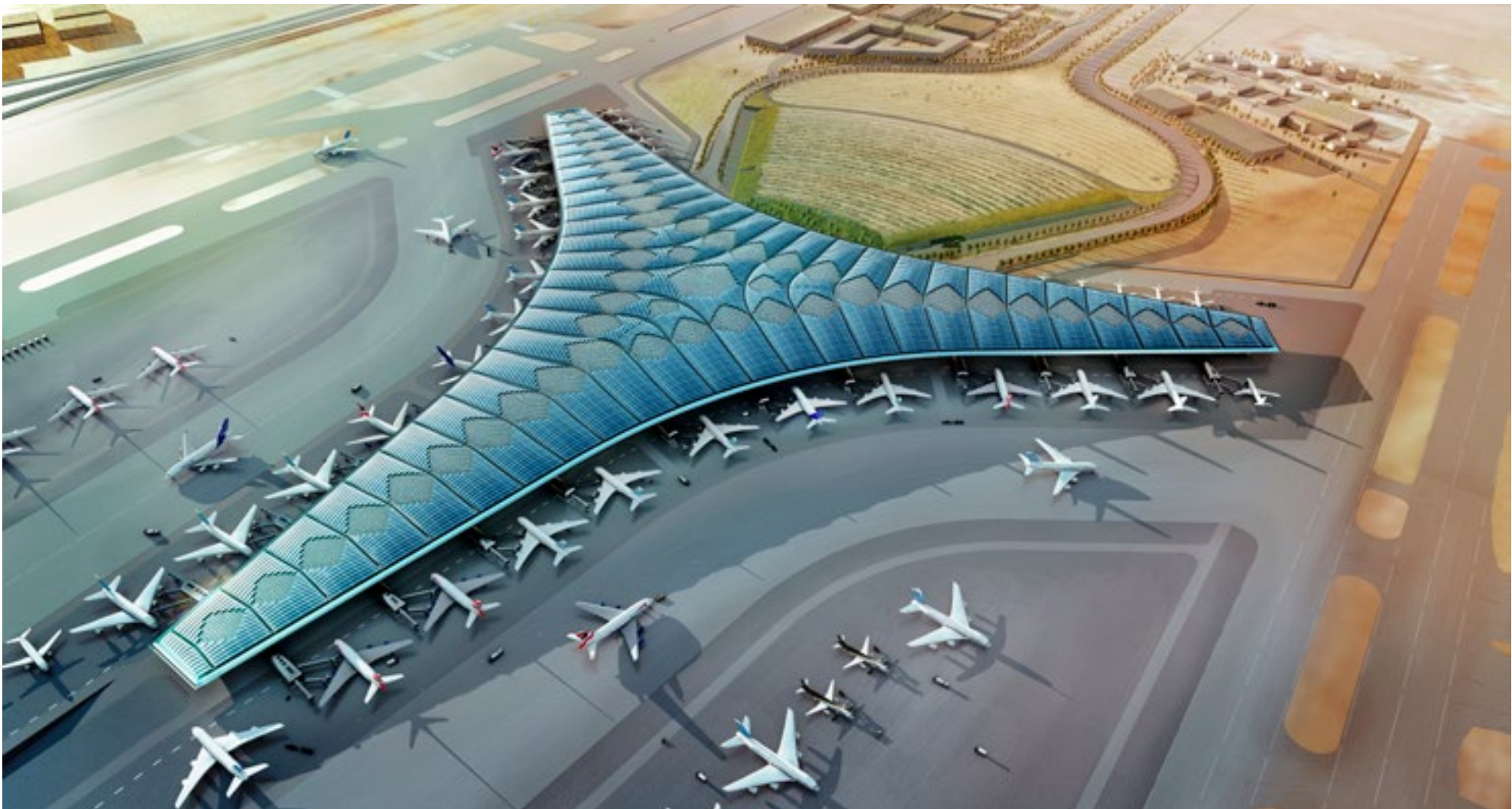
BREEAM Pre-Assessment





# TRANSPORTATION

Within the transport projects, we highlight the airport typology. AECOM has been part of the design of several airports, taking into account sustainability.



**KUWAIT INTERNATIONAL AIRPORT**  
Kuwait

LEED Pre-Assessment

**KUWAIT SUPPORT TERMINAL**  
Kuwait

Sustainable Design (Landscape)



# TRANSPORTATION



**MAUN AIRPORT**  
Maun, Botswana

Bioclimatic design



**LIMA INTERNATIONAL AIRPORT**  
Lima, Peru

Sustainable design



**JAMAICA AIRPORT**  
Kingston, Jamaica

Biophilic design



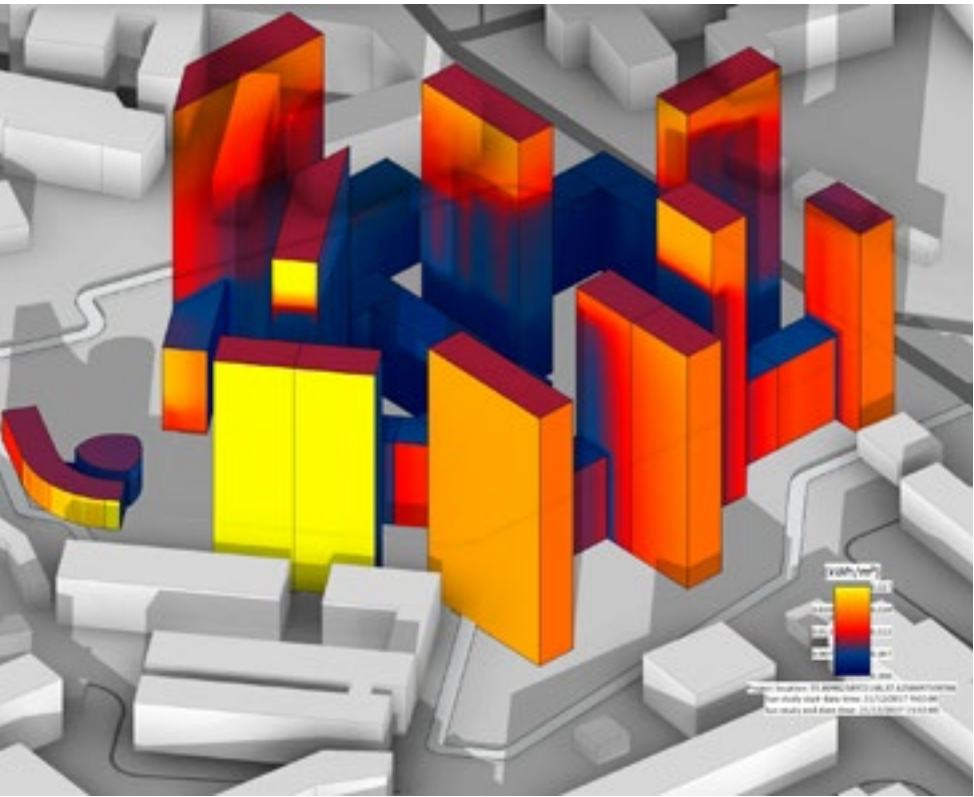
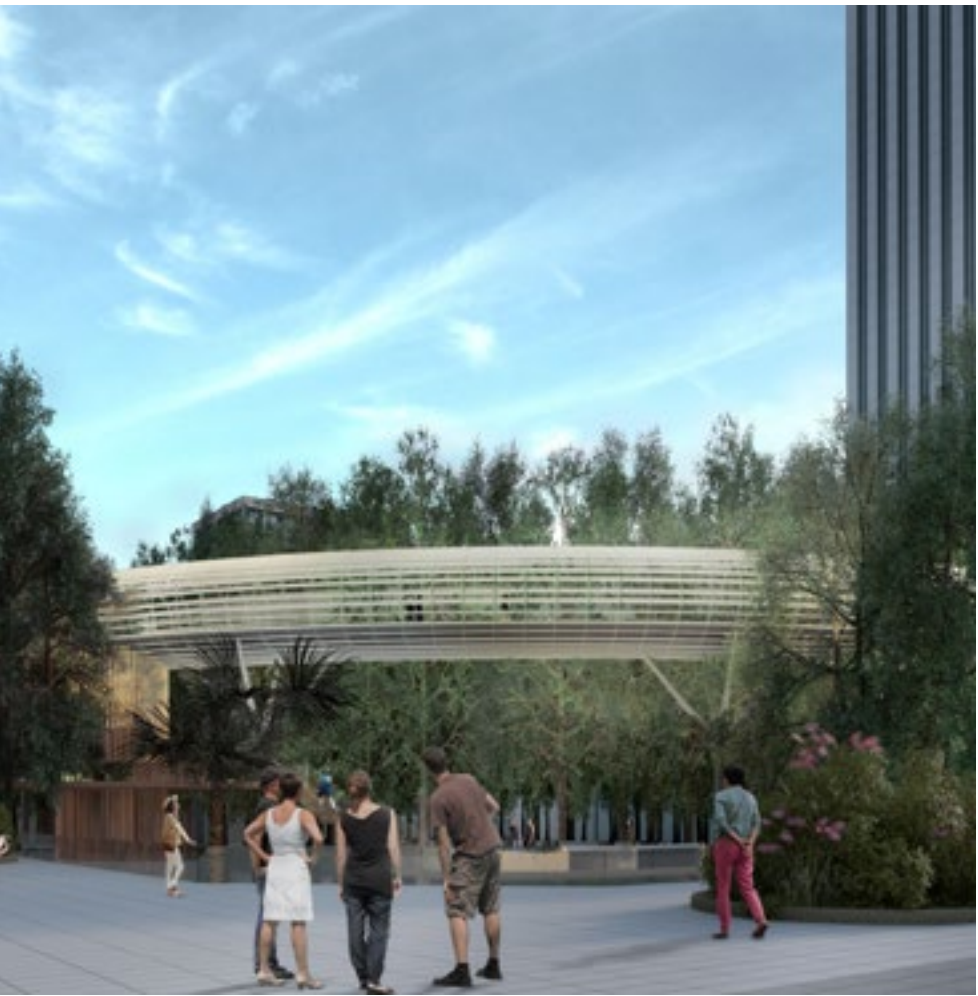
# SUSTAINABLE MASTERPLANNING

AECOM's participation on emblematic projects make possible to develop sustainable solutions, as regards the preservation of existing green areas and develop a non-polluting massive system of transport.



**HEART OF LISBON**  
Lisbon, Portugal

Sustainable design



**NEIGHBORHOOD**  
Moscow, Russia

Sustainable design



**RIGA DEVELOPMENT**  
Riga, Latvia

Sustainable design



**ANILLO AZCA**  
Madrid, Spain

Sustainable design



# RESIDENTIAL AND HOSPITALITY

AECOM has a qualified team of specialists in building and construction of residential typology, from family house to multifamily developments.



**RESIDENTIAL BUILDING GARIBAY**  
Madrid, Spain

BREEAM NC



**LAS COLINAS. MADROÑOS**  
Orihuela, Spain

Bioclimatic design



**LAS COLINAS. MIMOSA**  
Orihuela, Spain

Bioclimatic design



**LARNACA HOUSING**  
Larnaca, Cyprus

Bioclimatic design



## ABOUT AECOM

AECOM is the world's premier infrastructure firm, delivering professional services throughout the project lifecycle — from planning, design and engineering to consulting and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm with revenue of approximately \$20.2 billion during fiscal year 2019. See how we deliver what others can only imagine at [aecom.com](https://www.aecom.com) and @AECOM.