

Unit 8, 24-28 Pritchards Road E2 9AP Londres, RU  
<https://atmoslab.io>  
 hello@atmoslab.io  
 +44 [0] 2078673768 + T

Atmos Lab is a consultancy that helps architecture deal with environmental issues by design. Our work builds on the combination of knowledge from various disciplines to create bespoke methodologies and technologies for each project. We diagnose and improve the performance of live and work spaces as we make complex data easy to understand and implement. Our climate responsive solutions ensure naturally people's comfort, minimize energy consumption, running costs and carbon impact. We believe that architecture has a major role to play in reducing carbon emissions: our work addresses the environmental challenges of our time by making human life more sustainable.

### Team

- ↳ Florencia Collo - co-founder, arch., expert MSc. AA, PLEA assoc.
- ↳ Olivier Dambron - co-founder, eng., expert MSc. AA
- ↳ Rafael Alonso Candau - co-founder, arch., expert MArch. AA
- ↳ Lawrence Monfort - environmental specialist, MSc. AA
- ↳ Lizette Ochoa - environmental specialist, MArch. AA

### Ethos

Throughout the 20th century, architecture relied on mechanical equipments to ensure its energy efficiency and instilled the idea that comfort is an artificial product. Today, the construction industry is responsible for 39% of global energy related carbon emissions: the challenge of designing naturally comfortable and healthy buildings that perform requires a new approach.

- ↳ Our action : help architecture face the environmental challenges of our time with built-in common sense. Playing with temperature, sunlight or wind, we provide architects a climate-responsive frame of mind, and healthier solutions to build with: more efficient, more comfortable, more sustainable.

### Services

With new tools for calculation and new angles for interpretation, we reinvent the dialog between engineering and architecture. We always seeks the fairest solution, the clearest course of action, and the most direct way to report our work. We care for simple answers, we stand up to simplistic views.

- ↳ for design teams :

- project leaders both architects and environmental design experts
- a scientific approach tailored to the project with great precision
- research based methods
- bespoke project tools
- architectural representations and effective info-graphics

- ↳ our core goals :

- emit the least amount of carbon in the atmosphere
- satisfy thermal & visual comfort as passively possible
- develop project intelligences to save matter, equipments and costs
- integrate in projects a high resilience to future climates

- ↳ expertise and studies :

- bioclimatic design
- diagnosis of passive performance
- life-cycle analysis, thermal performance, indoor & outdoor comfort, solar radiation, daylighting, natural ventilation, views.
- architectural representations and effective info-graphics

### Technology

We develop architectural and engineering tools based on state of the art technologies to always gain in precision, flexibility, communication and efficiency. Our experts measure the impact of design decisions holistically to avoid collateral trade-offs and to spot correlations in between various strategies.

### Research and teaching

Transfers of knowledge in between research and practice maintains our work at the forefront of our field. Our three co-founders are researchers in bioclimatic design in the field of architecture. They have been/are involved at ETH Zurich (CH), EPFL Lausanne (CH), KADK Copenhagen (DK), ENPC Paris (FR), AA SED London (UK), RCA London (UK), ITB Bandung (ID), UPH Jakarta (ID), UBA Buenos Aires (AR), and UB Belgrano (AR).

## PROJECTS

### **Underground volumes for culture, sports & exhibitions - La Défense, Paris, France**

**Type:** refurbishment+extension  
**Client:** Paris La Défense  
**Architects:** BAUKUNST  
**Date:** 2021

### **134 residential units, Lelong, St Vincent de Paul - Paris, France**

**Type:** refurbishment+extension  
**Client:** Paris & Métropole Aménagement  
**Architects:** Lacaton & Vassal  
**Date:** 2021

### **Hotels & Business center, PEX - Toulouse, France**

**Type:** new construction  
**Client:** Toulouse Métropole, Europolia  
**Architects:** Lacaton & Vassal  
**Date:** 2021

### **BHV homme Galeries Lafayette, Le Marais - Paris, France**

**Type:** refurbishment+extension  
**Client:** Citynove  
**Architects:** OFFICE Kersten Geers David Van Severen  
**Date:** 2021

### **Wine cellar of Chateau-Lafite Rothschild - Pauillac, France**

**Type:** refurbishment+extension - competition  
**Client:** Domaines Barons de Rothschild  
**Architects:** John Pawson & David Leclerc  
**Date:** 2021

### **40 Leaden Hall street - London, United Kingdom**

**Type:** new construction  
**Client:** M&G Prudential  
**Architects:** Mace + Make  
**Date:** 2021

### **264 residential units Queen Towers - Ghent, Belgium**

**Type:** new construction  
**Client:** Triple Living  
**Architects:** OFFICE Kersten Geers David Van Severen  
**Date:** 2019

### **Greenwich Peninsula's Upper Riverside - London, UK**

**Type:** new construction  
**Client:** Knight Dragon  
**Architects:** Mace + SOM  
**Date:** 2018

### **Clouds Catcher, XII Int. Architecture Biennale São Paulo, Brazil**

**Type:** installation/exhibition  
**Client:** XII Int. Architecture Biennale of São Paulo  
**Architects:** Bruther  
**Date:** 2019

### **Galleries Lafayette - Pau, France**

**Type:** new construction  
**Client:** Citynove  
**Architects:** Bruther  
**Date:** 2019

### **Residential towers in Spielbudenplatz - Hamburg, Germany**

**Type:** new construction  
**Client:** Bayerische Hausbau GmbH  
**Architects:** Lacaton & Vassal  
**Date:** 2019

### **Ministry of economy and finance - Buenos Aires, Argentina**

**Type:** refurbishment+extension  
**Client:** Ministry of Development of B.A.  
**Architects:** Martín Torrado  
**Date:** 2018

### **Bioclimatic halls - Bordeaux, France**

**Type:** new construction  
**Client:** OFFICE Kersten Geers David Van Severen  
**Architects:** OFFICE Kersten Geers David Van Severen  
**Date:** 2018

### **CP house - Buenos Aires, Argentina**

**Type:** new construction  
**Client:** private  
**Architects:** Adamo-Faiden  
**Date:** 2018

170 social housing - Madrid, Spain  
 Type: new construction  
 Client: TAAs + Javier García Germán  
 Architects: TAAs + Javier García Germán  
 Date: 2018

Centre National des Arts Plastiques - Paris, France  
 Type: refurbishment+extension - competition  
 Client: CNAP  
 Architecte: Lacaton & Vassal  
 Date: 2018

## RESEARCH & DEVELOPMENT

Development of parametric tools for compliance to UK regulations  
 Context: Ladybug Tools European Partner  
 Date: 2019

Modern Sustainable Architecture of Argentina (FC)  
 Context: Internal Research  
 Date: 2019

Life Cycle Analysis and carbon footprint of office buildings in London (RAC)  
 Context: MArch AA SED - AA School of Architecture  
 Date: 2016

Solar Urbanism and Facade Design in Buenos Aires (FC)  
 Context: MSc AA SED - AA School of Architecture  
 Date: 2016

Potential Environmental Design for Bamboo Architecture in the tropics (OD)  
 Context: MSc AA SED - AA School of Architecture  
 Date: 2016

## PUBLICATIONS

"It's nice today", Post-occupation evaluation  
 Editor: Lacaton Vassal, ETH ZURICH, Ruby Press  
 Language: Anglais  
 ISBN: 9783944074375  
 Date: 2021

Contemporary Review of Housing Typologies for Argentina's Countryside by Grupo Austral (FC)  
 Editor: Architectural Science Review  
 Language: English  
 ISBN: inprint  
 Date: 2020

Sustainability through passive design in "A new indigenous university in the rainforest in Colombia" (OD)  
 Editor: Anne Lacaton, ETH Zurich  
 Language: Anglais  
 ISBN: Contribution in book  
 Date: 2020

The pleasures of summer and winter in "Qualities of inhabiting" (FC)  
 Editor: Anne Lacaton, ETH Zurich  
 Language: Anglais  
 ISBN: Contribution in book  
 Date: 2020

Construcción en tierra: impacto en el funcionamiento pasivo y emisiones de CO2 de una vivienda in "SOS Tierra" (RAC)  
 Editor: SOS Tierra  
 Language: Spanish  
 ISBN: inprint  
 Date: 2020

Diagnóstico ambiental de la Ciudad de Buenos Aires, soluciones sustentables (FC)  
 Editor: PLOT édition spéciale n°10  
 Language: Spanish  
 ISSN: 2250-8554  
 Date: 2018

Contemporary review of Regional Plan for Argentina's countryside by Grupo Austral (FC)  
 Context: PLEA, Passive Low Energy Architecture  
 Editor: PLEA 2018 Hong Kong Conference Proceeding  
 Language: English  
 ISBN: 978-962-8272-35-8  
 Date: 2018

Whole-life Carbon in Office Building Design (RAC)  
 Context: PLEA, Passive Low Energy Architecture  
 Editor: PLEA 2018 Hong Kong Conference Proceeding  
 Language: English  
 ISBN: 978-962-8272-35-8  
 Date: 2018

Wladimiro Acosta, pionero de la arquitectura bioclimática (FC)  
 Editor: PLOT n°42  
 Language: Spanish  
 ISSN: 1853-1997  
 Date: 2018

Solar Urbanism and Building Design in Buenos Aires (FC)  
 Context: PLEA, Passive Low Energy Architecture  
 Editor: PLEA 2017 Edinburgh Conference proceeding  
 Language: English  
 ISBN: 978-0-9928957-5-4  
 Date: 2017

Contemporary Validation of Wladimiro Acosta's Helios System  
 Context: PLEA, Passive Low Energy Architecture  
 Editor: PLEA 2017 Edinburgh Conference proceeding  
 Language: English  
 ISBN: 978-0-9928957-5-4  
 Date: 2017

## ACADEMIC PARTICIPATIONS

Lecture: "Buenos Aires: the climate and the city" (FC)  
 Institution: CEU Cardenal Herrera  
 Location: Valencia, ES  
 Date: 2021

Lecture: "Lessons from vernacular architecture" - studio A.Verschuere (FC)  
 Institution: EPFL  
 Location: Lausanne, CH  
 Date: 2021

Guest critic: Inter. & Final Critic at Studio Anne Lacaton (OD)  
 Institution: ETH Zurich  
 Location: Zurich, CH  
 Date: 2020

Seminar: Environmental design for bamboo tropical architecture at Studio Anne Lacaton (OD)  
 Institution: ETH Zurich  
 Location: Zurich, CH  
 Date: 2020

Head of technical staff at MA "Environmental Architecture" (AL)  
 Institution: Royal College of Arts  
 Location: London, UK  
 Date: 2017 - present

Invited jury MA "Environmental Architecture" (AL)  
 Institution: Royal College of Arts  
 Location: London, UK  
 Date: 2017 - present

Ladybug Tools Workshop (AL)  
 Institution: Royal Danish Academy of Fine Arts  
 Location: Copenhagen, Denmark  
 Year: 2019

Invited jury Studio Anne Lacaton (FC)  
 Institution: ETH Zurich  
 Location: Zurich, Suisse  
 Year: 2019

Seminar Atmos Lab today at postgraduate Sustainable Environmental Design" (AL)  
 Institution: Architectural Association  
 Location: London, UK  
 Date: 2018, 2019

Invited jury postgrad. Sustainable Environmental Design"(RAC)  
 Institution: Architectural Association  
 Location: London, UK  
 Date: 2018

Academic tutor and invited jury Master Design by Data (OD)  
 Institution: École des Ponts ParisTech

**Location:** Paris, France  
**Date:** 2018

**Workshop Daylighting et Solar Control via Ladybug Tools (OD)**

**Institution:** Institut Teknologi of Bandung  
**Location:** Bandung, Indonésie  
**Date:** 2018

**Seminar Bioclimatic Architecture at Taller Soler (FC)**

**Institution:** FADU, UBA  
**Location:** Buenos Aires, Argentina  
**Date:** 2017

**Seminar: New tools for environmental design at studio "Theory of Architecture -Valentino"**

**Institution:** FADU, UBA  
**Location:** Buenos Aires, Argentina  
**Date:** 2017

Unit 8, 24-28 Pritchards Road E2 9AP Londres, RU

<https://atmoslab.io>

[hello@atmoslab.io](mailto:hello@atmoslab.io)

+44 [0] 2078673768 + T