



**A new era of PERSONAL AIR COMMUTING**



**AMAZING “FLYING CARS” for ANYONE**  
to help **BUSY URBAN PEOPLE SAVE DAILY**  
**COMMUTING TIME** with a **GREENER, MORE**  
**EFFICIENT** and **CHEAPER** vehicle

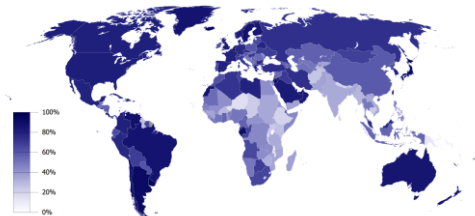


# More than 4 billion people live in crowded, polluted cities, under an untenable urban development model scheme

## UN World Urbanization Prospects

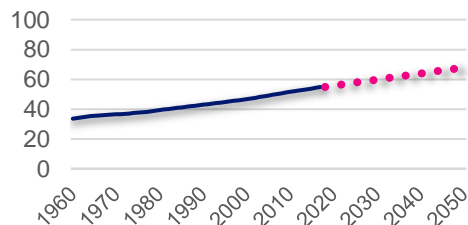
The urban population of the world has grown rapidly from 751 million in 1950 to **4.2 billion in 2018**. Asia, despite its relatively lower level of urbanization, is home to 54% of the world's urban population, followed by Europe and Africa with 13% each.

### Urbanization distribution by country



The **most urbanized regions** include Northern America (with **82% of its population living in urban areas** in 2018), Latin America and the Caribbean (81%), Europe (74%) and Oceania (68%). The level of urbanization in Asia is now approximating 50%. In contrast, Africa remains mostly rural, with 43% of its population living in urban areas.

### World urbanization evolution



Today, 55% of the world's population lives in urban areas, a proportion that **is expected to increase to 68% by 2050**. Projections show that urbanization, the gradual shift in residence of the human population from rural to urban areas, combined with the overall growth of the world's population could add another 2.5 billion people to urban areas by 2050, with close to 90% of this increase taking place in Asia and Africa, according to a new United Nations data set.



Expiration of  
current urban  
development  
patterns

## Sustainable urbanization is key to successful development

Understanding the key trends in urbanization likely to unfold over the coming years is crucial to the implementation of the **2030 Agenda for Sustainable Development**, including efforts to forge a **new framework of urban development**.

As the world continues to urbanize, sustainable development depends increasingly on the **successful management of urban growth**, especially in low-income and lower-middle-income countries where the pace of urbanization is projected to be the fastest. Many countries will face challenges in meeting the needs of their growing urban populations, including for **housing, transportation, energy systems and other infrastructure**, as well as for employment and basic services such as education and health care. Integrated policies to improve the lives of both urban and rural dwellers are needed, while **strengthening the linkages between urban and rural areas**, building on their existing economic, social and environmental ties.

To ensure that the benefits of urbanization are fully shared and inclusive, policies to manage urban growth need to **ensure access to infrastructure and social services for all**, focusing on the needs of the urban poor and other vulnerable groups for housing, education, health care, decent work and a safe environment.

Source: United Nations Population Division – World Urbanization Prospects: 2018 Revision & GunnMap



**4 BILLION PEOPLE**  
**LIVE IN CROWDED, POLLUTED CITIES**



# New more ecological action plans for urban mobility are a must for the next years to face the challenging urban future

## European Commission Action Plan on Urban Mobility



### Green paper on urban mobility towards a new culture making our towns and cities

- More fluid
- Greener
- Smarter
- Safer
- More accessible



*Cities are home to over 70 % of the EU population and account for some 85 % of the Union's GDP.*

*Most journeys begin and end in cities. In many urban areas, however, increasing demand for urban mobility has created a situation that is not sustainable: **severe congestion, poor air quality, noise emissions and high levels of CO2 emissions.***

*Urban congestion jeopardizes EU goals for a competitive and resource-efficient transport system.*

Severe congestion, pollution and noise are common problems in cities, to which must be added the **growing pressure of mass tourism** and the **unstoppable increase in housing prices**, both in the center but also on the periphery of those cities

However, cities also offer **great opportunities** in education, culture, entertainment and, of course, **generating jobs**

# NEW MOBILITY PLAN



**GREENER**  
SUSTAINABLE



**SMARTER**  
FIT2FUNCTION

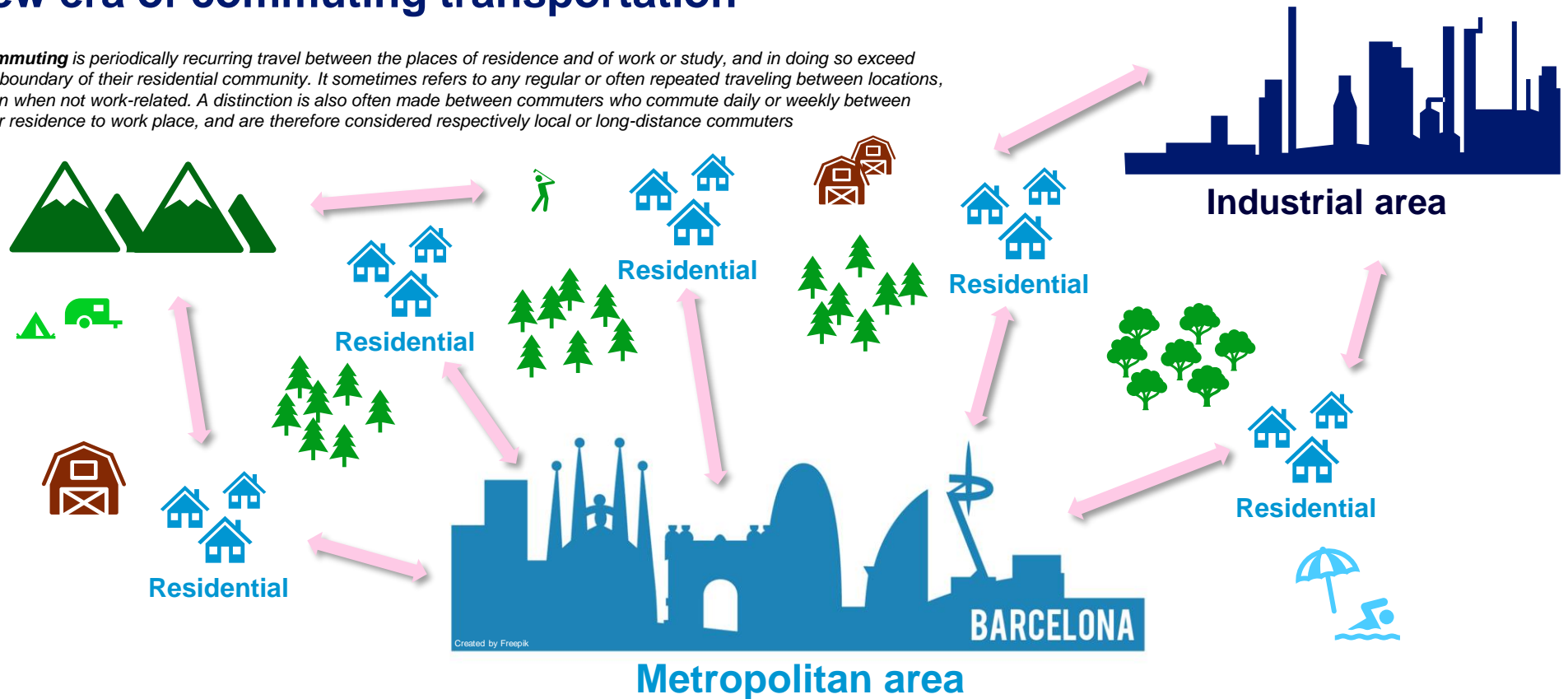


**LOWER  
COST**  
(CAPEX & OPEX)

# AAM proposes an advanced solution for personal air mobility aiming to redefine a new era of commuting transportation...

## New era of commuting transportation

**Commuting** is periodically recurring travel between the places of residence and of work or study, and in doing so exceed the boundary of their residential community. It sometimes refers to any regular or often repeated traveling between locations, even when not work-related. A distinction is also often made between commuters who commute daily or weekly between their residence to work place, and are therefore considered respectively local or long-distance commuters



Advanced solution for daily **interurban mobility -commuting-** between residential areas (living place) and commercial / industrial / educational areas (workplace)

# ...that can significantly reduce the intercity travel times by a quarter by direct flights instead of slow ground itineraries...

## Travel time reduction

### ▪ RECTILINEAR TRAJECTORY

The **shortest distance** between two points is the straight line that can be traced from the air, in front of a car journey through streets, roads and highways, with its intersections, traffic lights and other obstacles to save

### ▪ HIGH AVERAGE SPEED

An aircraft can sustainably and unrestrictedly maintain a **cruise speed of 250 km/h** (higher than the high-speed train) compared to the average speed of a car that is limited to 120 km/h on the highway, but that is reduced at 30-50 km/h in the city

Interurban travel	Ground transport Private car	Aerial transport e2PAC
<b>First</b> metropolitan ring E.g. BCN-Terrasa	<b>30 km   30/60 min</b> 50/25 km/h	<b>20 km   8 min</b> 150 km/h
<b>Second</b> metropolitan ring E.g. BCN-Manresa	<b>60 km   45/80 min</b> 80/50 km/h	<b>45 km   14 min</b> 200 km/h

## Barcelona hinterland



The distance traveled in an interurban displacement in a metropolitan area like Barcelona is established at 30 km for the first belt and at 60 km for the second ring

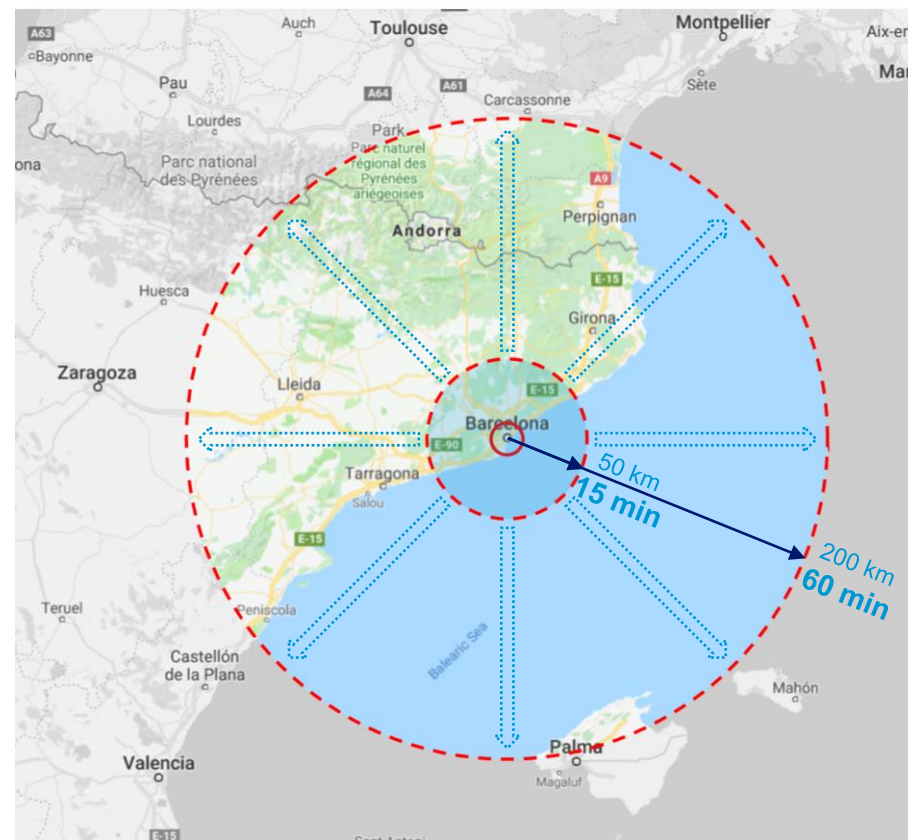
**e2PAC can make the same trip  
at a quarter of the time**



## ... extending the commuting range towards a model of more affordable, balanced urban and territorial development

The immediate effect of "compressing" the travel distances and expanding the radius of action for the same travelling time, allows to reduce the current tensions generated by intensive urban development of the cities in delimited spaces of high population density, **redefining the concept of metropolitan areas towards a more rational and sustainable model of management and use of the territory**

- It will significantly reduce travel time, allowing people to live in the countryside while still working in the city, so that **buying our homes will be more affordable** in the city since it will not be a key factor in choosing a job
- Combining the air transport of commuting with land transport (metro, bus, taxi / VTL), **mobility on demand** will reduce the need to have our own car, which means less traffic, less noise and less pollution in cities
- The **requirement in infrastructures is minimal**, with a low urban, environmental and economic impact, since there is no need for new roads, rails or hyper-tubes, but simple landing points that can be built by anyone under adequate technical supervision



It will make it possible to continue enjoying all the benefits of the city without the inconveniences of large metropolises such as high real estate prices or long travel times, improving the quality of life in both urban and rural environments and optimizing the use of the territory as a whole for a better social re-equilibrium



Welcome to the  
**FUTURE**

Welcome to the  
**URBAN AIR  
MOBILITY**

[AAMobility.eu](http://AAMobility.eu)

# We offer you a new generation, environmentally friendly, high performance aircraft, for daily extended –200 km– commuting

- **On demand personal mobility**
  - **200 kg payload** | Capacity for 2 passengers
- **High performance aircraft**
  - **Speed 250-300 km/h** | Range 300-500 km
- **Extreme STOL capability**
  - **Short take-off and landing** | < 50 m
- **Fully autonomous flight**
  - **Autopilot** | Automatic navigation system
- **Environmentally friendly**
  - **Electric propulsion** | Sustainable transport solution, with zero emissions in flight and low acoustic impact in operation



Advanced Air Mobility offers you our proposal for a **new urban air mobility** to reduce travel time, city pollution, noise, traffic congestion..., in search of a **new territorial rebalancing**



# FOUNDING TEAM of the project

**Carles MARTÍ**  
President



- **B.Econ.** from University of Barcelona and **Ph.D.(c)** in mathematical economics and industrial organization from the University of California (Berkeley) where he was an Assistant Professor
- **President in AOPA-Spain**, the main worldwide association of private pilots and aircraft owners, partners recognized by the Spanish and European aeronautical authorities (DGAC, AESA & EASA)
- Ex **President** of Barcelona-Sabadell Flying Club, one of the main private aviation operators of Europe ((more than 150,000 hours of flight), ex **President** of Cerdanya Airport management company, founding member and **executive committee** of the Catalan Association of Aeronautical Industry (BAIE) and ex Vice-president of the association of companies of the Sabadell Airport of the AENA network
- **Senior Consultant** in programs of cooperation and business development for the European Commission and for the Inter-American Development Bank (IDB)
- Ex **Managing Director** of the first Technology Park in Spain. He was also Director General of Studies and Strategy of the Consortium of the Free Trade Zone of Barcelona
- **Experienced acrobatic pilot** in more than 30 different aircraft types, including acrobatic exhibitions

**Aitor MARTÍN**  
CEO



- **M.Sc. Aeronautical** Engineer from Polytechnic University of Madrid & **MBA** from CESMA Business School, as well as Professor at Polytechnic University of Catalonia
- **Managing Director** of iTOR MARTÍN, an aeronautical boutique consultancy and engineering company
- More than 12 years as **Strategic Consultant** –ALG/Indra, Aviation Pasiphae, iTOR MARTÍN – with relevant experience covering the entire value chain in the aviation sector, from manufacturing to operations, from infrastructure to the regulations, with a **global knowledge of the aeronautical industry** thanks to several projects including Master Planning, Strategic Development Plans, feasibility studies, implementation programs, certification processes..., both at regional, national and international level, from the strategic, business, technological, industrial and operational perspectives
- Led the develop of the **European commercial network** of DART Aerospace, a leading Canadian supplier of spare parts outside OEMs, in collaboration with the maintenance center Part 145 Heliswiss Ibérica
- Worked as Engineer in the rotorcraft division of Airbus (formerly Eurocopter)
- **Unmanned vehicles expert** (UAV / RPAS / Drones) for market and future applications analysis, regulation development and even RPAS pilot training

# ENTHUSIASTIC TEAM of aeronautic engineers

## Adrià PI | HEAD OF ENGINEERING



- Aeronautical Engineer from Polytechnic University of Catalonia
- Continental Quality Process engineer, including process redefinition and optimization, production KPI and
- Aertec junior consultant for airport operations and handling
- Vueling power plant engineer

DANIEL  
MONTON

**Aerodynamics  
and high lift**



XAVI  
VALLS

**Aerodynamics and  
mechanical design**



GUILLEM  
VALERO

**Flight control  
and innovation**



JOAN  
ALTIMIRA

**Structure and  
systems integration**



UNIVERSITAT POLITÈCNICA DE CATALUNYA  
BARCELONATECH

Escola Superior d'Enginyeries Industrial,  
Aeroespacial i Audiovisual de Terrassa



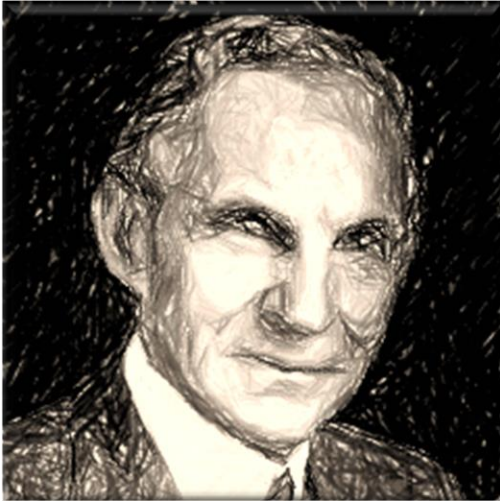
- eProject is a university-enterprise collaboration initiative for the integration of engineering students in the labor world through the participation in a real aeronautical engineering project
- In the last 3 years, more than 40 students have already actively participated in the eProject development and conceptual design
- **New eProject edition coming soon...**

## eProject team



*TARGET accomplished: Initial aerodynamics and structural calculations and manufacture of scale model*

# A flying dream: Henry Ford's attempt to make us all pilots



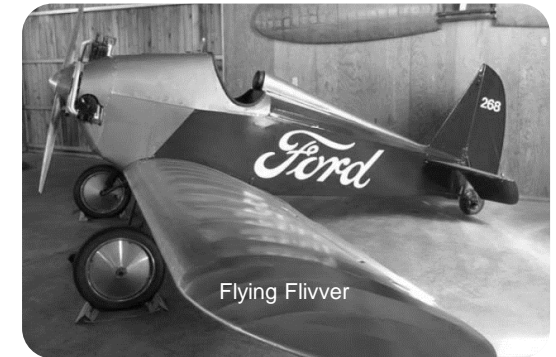
## Henry Ford

Nationality: American

Born: July 30, 1863 in Michigan

Died: April 7, 1947 in Michigan

Occupation: Industrialist



***“Mark my words: a combination airplane and motorcar is coming. You may smile, but it will come.”***

*“When everything seems to be going against you, remember that the airplane takes off against the wind, not with it.”*

*Henry Ford*



# AAM Advanced Air Mobility

AAMobility.eu



A NEW ERA OF  
**PERSONAL AIR COMMUTING**