



The 2024 Paris Olympics: A showcase of tomorrow's sustainable city

Webinar - Wednesday, October the 28th, 2020
SOLIDEO – Choose Paris Region

On time and on budget: a 5-year challenge



**43 simultaneous world
championships**

10.500 athletes for the Olympics

4.500 athletes for the
Paralympics

50.000 volunteers

25.000 journalists

13 million tickets sold

4 billion viewers



JOP Paris 2024
A global concept



- 93% of the Olympic infrastructure already exists
- **2 main zones:**
 - Grand Paris Zone
 - Paris Centre Zone
- **Also:**
 - Versailles/Elancourt (78)
 - Vaires-sur-Marne (77)
 - Marseille (13)
 - Tahiti (987)
- **Solideo's role:** Build the long-term structures (French State legacy)

Clear governance and a sober budget

**Transparent governance
that puts the Games first**

Budget:

**€3.2
billion**

€1.7 billion
private
€1.5 billion
public

SOLIDEO



Public body / EPIC

Tasked with the delivery
of permanent sites
and infrastructure

International Olympic
Committee

Host City Contract

PARIS 2024



Private body / association

Tasked with planning
and delivery of Games
operations

Budget:

**€3.8
billion**

€3.7 billion
private
€0.1 billion
public

**HERITAGE
ACTORS**

MAIRIE DE PARIS



île de France

seine-saint-denis
LE DÉPARTEMENT



Tasked with delivery
of all heritage programmes
at all levels

DIJOP

Interministerial Delegation

Tasked with supporting and preparing the Games by coordinating the actions of the different ministries



SOLIDEO's missions

- Create ambition and concretise the 2024 and 2025 programmes
- Supervise the 29 project managers
- Concentrate all funding
- Ensure the project management of certain objects
- Communicate around projects
- Document new practices

Guarantee, whatever happens, that the works will be delivered



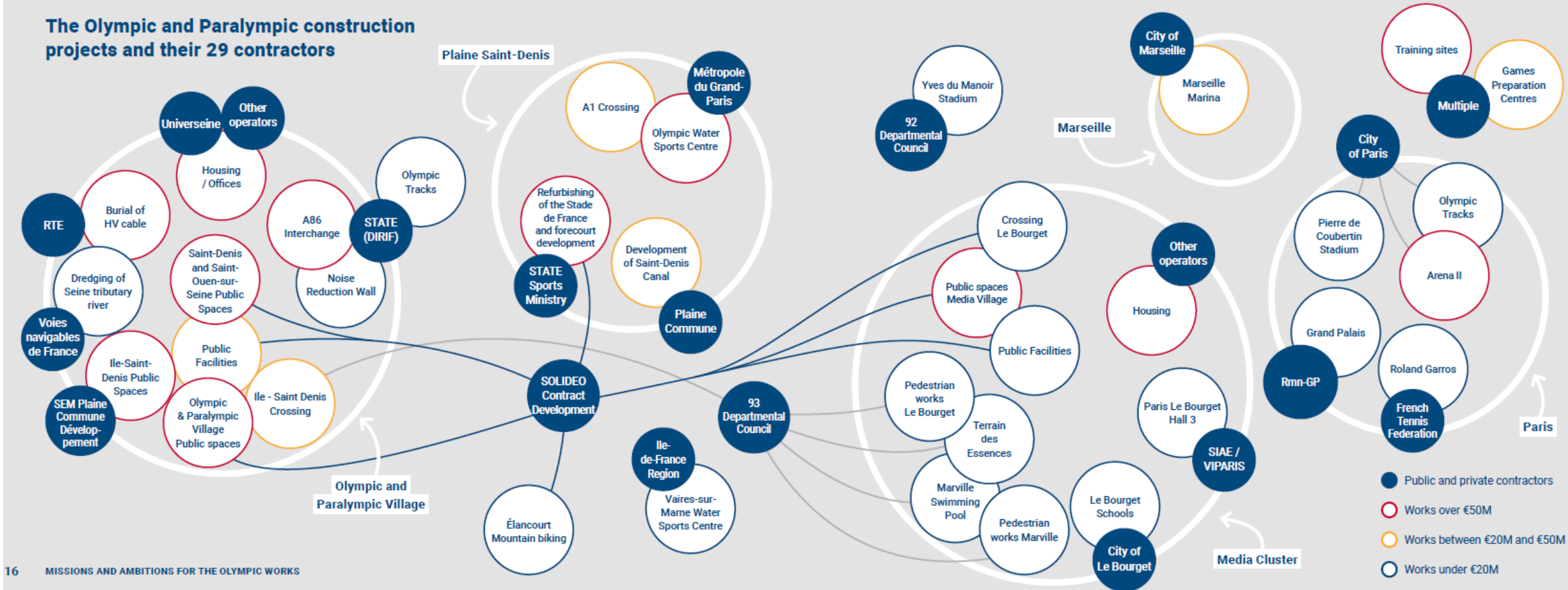
The French way: a decentralized but timely delivery

62 Olympic Structures

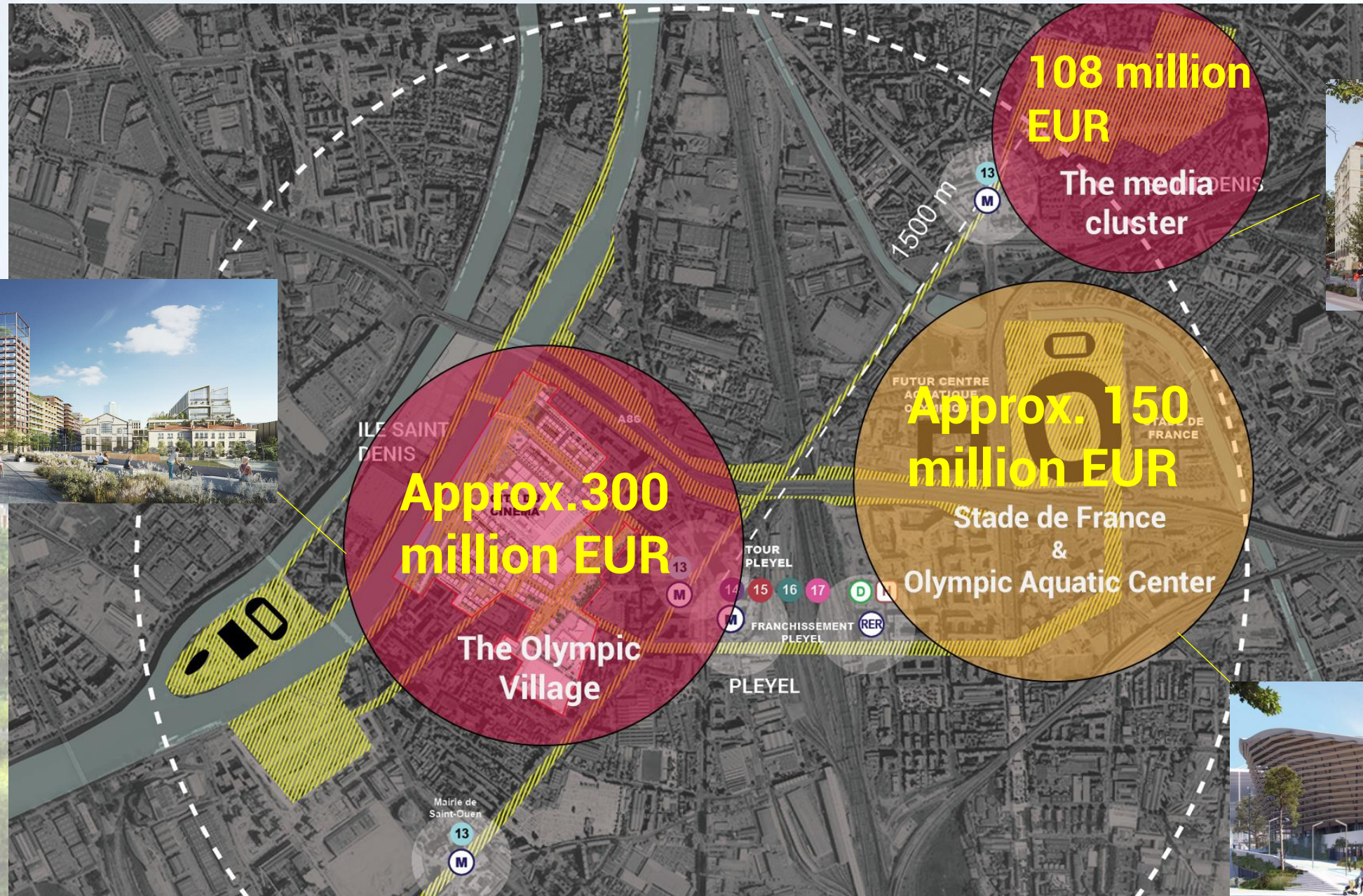
5 main sites

29 public and private partners

The Olympic and Paralympic construction projects and their 29 contractors

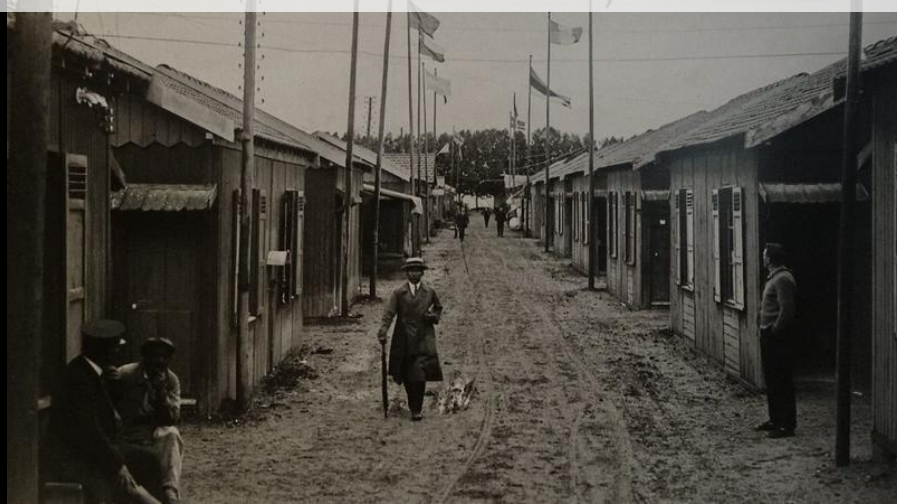


SOLIDEO is the direct project manager for 3 key sites



VILLAGE
LYMPIQUE

1924-2024: The Olympic Village





Prow building, facing
the Seine,
at the bottom of the
Mail Finot tree-lined
walk

(Icade-CDC / Brenac
and Gonzalez / UAPS)



Prow building, facing
the Seine,
at the bottom of the
Mail Finot tree-lined
walk

(Nexity-Eiffage /
Lambert&Lenac)



**Place Olympique,
from the Seine crossing**
**Universeine Buildings (Vinci /
Vergely / Chaix & Morel)**





The Media Cluster





The Olympic Aquatic Center



Arena II (Porte de la Chapelle)



An exceptionnal calendar

26 July 2024

Opening of the Paris 2024 Olympic Games

Summer 2025

Legacy
Building a sustainable
European city
by 2030

2021-2023

Works phase

1st quarter 2024

Works delivery

2020

Contracting
Planning permits
Site decommission and clean-up

2019

Selection of private operators
Land acquisition and
management

2018

Project Optimisation
Strategy and Vision
Environmental compliance

A specially created financial tool to foster innovation

INNOVATION FUND ("Fonds Vert Innovation")

36M Euros

A way to fund extra innovation in our projects

The Innovation Committee scrutinizes the projects that require extra funding

1 project financed by the Innovation Fund

The Aquatics Center's wooden roof

PARIS GREEN FUND

A 12M Euros subscription to the fund by SOLIDEO.

Managed by DEMETER, major player in venture capital and private equity for the energy and ecological transition.

Provides SOLIDEO with a portfolio of innovative fast-growing SMEs

Fostering the development of innovating projects

Each company financed by the fund will provide a demonstrator to SOLIDEO

EUROPEAN FUNDS

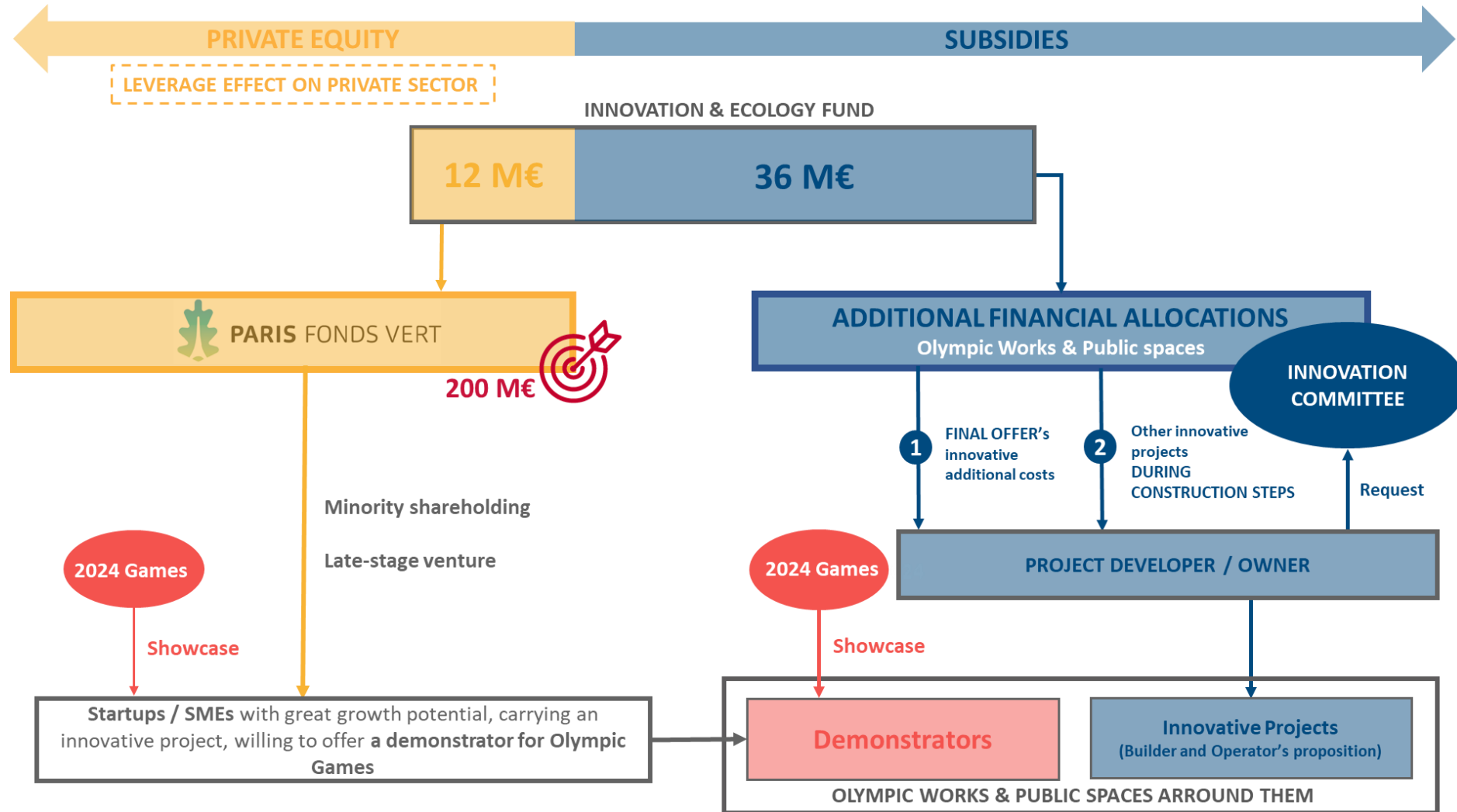
An opportunity for SOLIDEO

H2020, LIFE, IUA

500K to 6M Euros could be allocated to each project

Our target: the New Green Deal by H2020

FUND'S GENERAL SCHEME



SOLIDEO targets 3 European Calls

H2020, LIFE, Urban Innovative Action

By responding to these calls, SOLIDEO shows its capacity to respond to the major challenges facing the City and construction, **working with innovative companies which propose the best available technologies** for 2024.

We are looking for innovative-intense,
growing European companies, willing
to associate with SOLIDEO in this
European Adventure !

What is at stake:

**+ 500 000 € / 6 millions €
allocated to each project...**

**...through the funding of R&D
and the funding of high-TRL
projects.**

Our ambitions & strategy to design the city of tomorrow



Why do we innovate ?

- The image of France: ensuring the delivery of the games and facilities, by mobilising world-class innovations.
- **Acceleration of metropolitan dynamics**
- **Environmental ambition (in line with the Paris Climate Agreement)**
- **Methodological legacy**
 - New useful ways to accelerate the completion of major projects, which common law no longer allows to effectively guarantee today
 - Capacity of public and private engineering, technical, legal and financial partners, to deliver in a limited time
- **Reconnect with major urban projects**

Three pillars structure our ambitions...

Environmental
Excellence

Universal
access

Social inclusion

...declined into thematic goals

Environmental Excellence

Carbon neutrality by 2050

Biodiversity

Climate resilience

Social inclusion

10% of hours worked devoted to professional integration

Worksites with remarkable social practices

25% of contracts reserved for SMEs, and social economy enterprises

Universal access

Sensory city (experience the city)

An active city

Inclusiveness for vulnerable members of society

These ambitions are formalised into a prescriptive and binding framework for our projects

Demonstrable results...

**Carbon
neutrality by
2050**

Global approach to the cycle of life

Anticipate building reversibility

Build sensible buildings

**Climate
resilience**

Generalise the
bio-climatic approach

The development of cool islands

Anticipate crises

Ensure a high-quality indoor and
outdoor air

Biodiversity

Biodiversity support frame

Water - soil - plant management

Protect and enhance the local flora
and fauna

...which constitute the basis for SOLIDEO's innovation strategy²⁵

From strategy to action: we innovate in many fields

Carbon neutrality and circular economy

Wood Construction
Low Carbon Concrete
Additive Construction
(3D printing)
Deconstruction,
recycling, reuse

Adapting the city to climate change

A binding and prescriptive
framework based on the
2050 climate
Indoor and outdoor air
quality
Modelisations made on
evapotranspiration

Reconciling the city with biodiversity

Ecologic corridors
Biodiversity-friendly
urban lightening
Make the Seine river
greener

Making the city accesible again

Innovative and
sensitive guidance
Inclusive street
furniture
User-friendly building

Including the « smart citizen » in our projects

Empowering the user
through the smart city
Living Lab during the
work phase and the
heritage phase
Environmental
monitoring

Innovation is central to our projects: our proofs of concepts



The Olympic Village



Carbon neutrality: our POCS on the Olympic Village



Deconstruction, recycling, reuse

92 %

Overall valuation rate
August 2020



Carbon neutrality in 2050

-50%

Emissions reduction target compared to a conventional layout

>>>

-45%

Achieved on the number of planning applications submitted

23



La proue et le mail Finot

Wood construction

50 %

Area of low
wooden
accommodation

Innovation

Timber frame façades
on 90% of surfaces

Low Carbon Concrete

150 kg CO₂/m³

SOLIDEO objective, achieved on
average for the envisaged
concrete, for a usual value of 230
kg

The Olympic Aquatics Center



Our proofs of concepts on the Aquatics Center



Priority use of bio-based materials (wooden frame - construction of a large span wooden chain structure - 80m)

→ Financed by SOLIDEO's Innovation Committee

102

Planted trees

5000 m²

Of photovoltaic panels on the roof

Energy sobriety

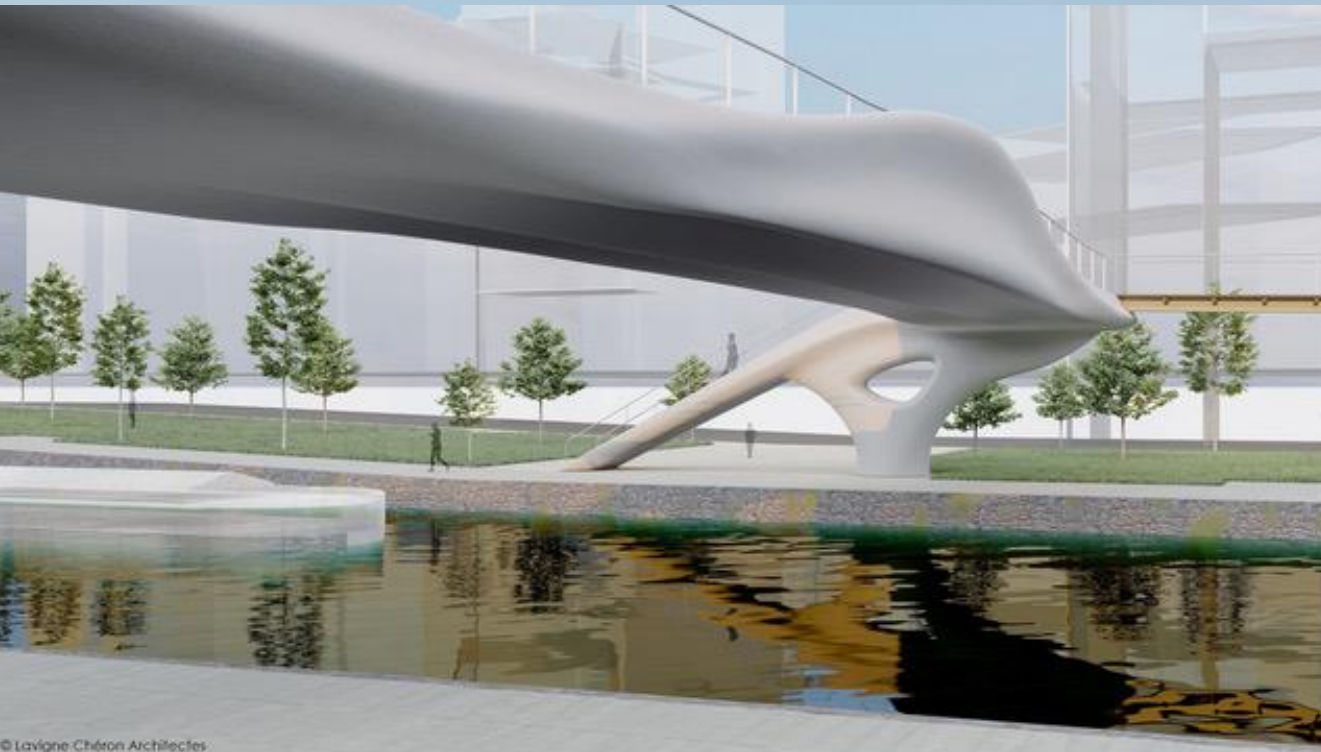
Less than 4700 kWh per year of primary energy per m² and per pool

An innovative carbon footprint

Less than 30,000 tons in CO₂ equivalent



Pierre Larousse bridge: the first 3D-printed concrete bridge ever made



- Under the supervision of Plaine Commune and designed by Freyssinet, Lavigne & Chéron Architectes, Quadric, XtreeE and LafargeHolcim.
- **40m-long bridge, 5 meter wide**, that will enable the pedestrians to cross the Saint-Denis Canal from Pierre Larousse street, to access the Gambetta Docks.
- Delivered for the Olympic Games 2024.

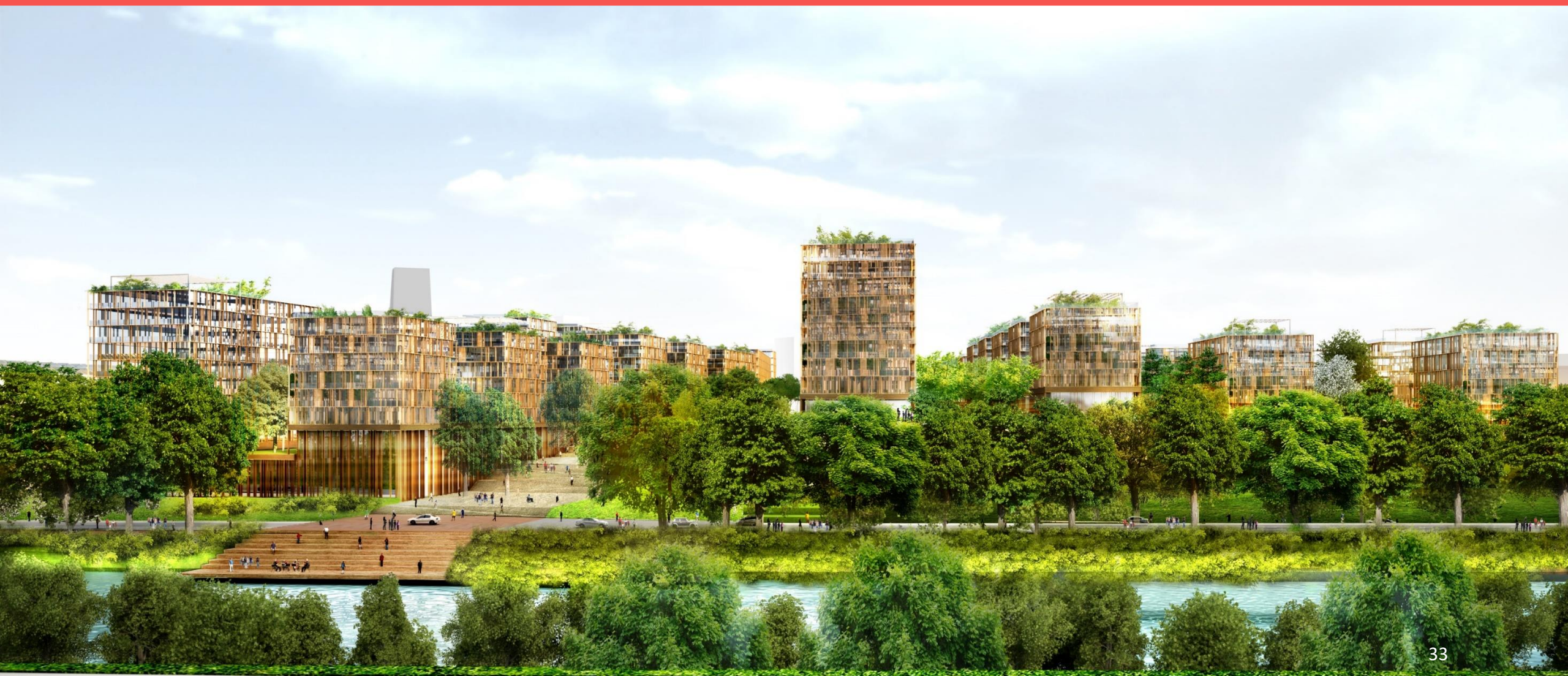
Economic and ecological frugality

60% less material used
for the construction of
the bridge

A low carbon
footprint

→ Financed by SOLIDEO's Innovation Committee

Targeting innovation in our tenders



WHAT WE PROPOSE



Ambitious challenges calling on regional innovators to come up with innovative solutions



A user centric approach by creating service oriented demonstrators (focused on the citizen's experience, and the development of new uses)

TO RE-INVENT PUBLIC SPACES



Because public spaces are places of life, meetings and exchanges of all city users, SOLIDEO carries out several thematic consultations that will allow **innovations that contribute to the creation of unique, resilient, connected and inclusive places.**

THROUGH THEMATIC CONSULTATIONS

Innovative and sensitive guidance

Data platform

IoT

Digital model in 3D and Virtual Reality

Universal accessibility

Biodiversity

But also outdoor air, urban heat islands, smart lampposts, inclusive urban facilities...

OUR TENDERS: CALENDAR

In process of attribution

Tenders to come soon

SUMMER 2020

FALL 2020

JANUARY 2021

SOLIDEO has launched 4 calls for innovation projects via the competitive dialogue procedure to improve the quality of :

Outdoor air

Urban heat islands

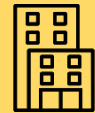
Smart lampposts

Inclusive urban facilities

By launching these calls, SOLIDEO is looking for:



Best available technologies and mature innovations at the state of the art in 2024 likely to constitute long-term innovations (legacy)



Solutions likely to be the subject of experimentation, particularly for innovations in use (replicability)

Innovative and sensitive guidance

Data platform

IoT

Digital model in 3D and Virtual Reality

Design of innovative services

Security on construction sites

Biodiversity

Zoom on : Data platform tender

What is at stake

During the construction and the heritage phases, SOLIDEO will deploy **a platform to host and monitor data produced by IoT captors and other data streams**. This platform will allow the development of new urban services and the possibility to supervise the territory.

Estimated tender value

200KE

Targeted companies

Innovation-intensive companies, proposing the best available technologies for 2024.

Small and growing companies, consortium of companies capable of responding to the major challenges facing the City and its construction.

To be launched in November 2020

Zoom on: IoT tender

What is at stake

In construction and legacy phases, SOLIDEO is eager to provide an **environmental monitoring through IoT captors**. The data collected by the IoT captors will raise users' awareness on climate change and help reduce their energetic consumption.

Estimated tender value

Approximately 200KE

Targeted companies

Innovation-intensive companies, proposing the best available technologies for 2024.

Small and growing companies, consortium of companies capable of responding to the major challenges facing the City and its construction.

To be launched in November 2020

Zoom on: Digital model in 3D and Virtual Reality tender

What is at stake

SOLIDEO is eager to produce 3D digital models of some of its urban projects like the Olympic Village, on the basis of BIM models. The aim is to **communicate** over SOLIDEO's works, to improve the **supervision in the construction phase**, to ensure a better **security and local governance** over the newly-built neighborhoods.

Estimated tender value

1 millions €

Targeted companies

Innovation-intensive companies, proposing the best available technologies for 2024.

Small and growing companies, consortium of companies capable of responding to the major challenges facing the City and its construction.

To be launched in November 2020

Zoom on: Design of innovative services tender

What is at stake

SOLIDEO is looking for **innovative solutions to co-construct a model of Smart City that empowers the citizen, through a series of workshops** with the city authorities in charge of the newly-built neighbourhoods in the legacy phase.

Estimated tender value

200KE

Targeted companies

Innovation-intensive companies, proposing the best available technologies for 2024.

Small and growing companies, consortium of companies capable of responding to the major challenges facing the City and its construction.

To be launched in November 2020

Zoom on: Innovative and sensitive guidance tender

What is at stake

In line with its ambition of universal accessibility in its projects during and after the Olympic Games, SOLIDEO is looking for **innovative solutions to facilitate the guidance of every type of user**, answering the needs of those with intellectual, cognitive and sensory disabilities.

What solutions we are looking for

The solutions can be deployed in public spaces, in street furniture, signage, at the individual scale...as long as they are as inclusive, and as accessible as possible.

Estimated tender value

n.c

Targeted companies

Innovation-intensive companies, proposing the best available technologies for 2024.

Small and growing companies, consortium of companies capable of responding to the major challenges facing the City and its construction.

To be launched in December 2020

Zoom on : Security on construction sites call

What is at stake

This call targets **innovative solutions to ensure the security and the well-being of construction workers and employees** on the construction site of the Olympic Village, thanks to **digital tools**.

What solutions we are looking for

The call will help bringing digital tools to the construction sites, in order to prevent risks, have the rules applied more efficiently, to control the construction costs and the timing and to report the data collected on site with regards to health and security.

Estimated tender value

n.c

Targeted companies

Innovation-intensive companies, proposing the best available technologies for 2024.

Small and growing companies, consortium of companies capable of responding to the major challenges facing the City and its construction.

To be launched in November 2020

OUR TENDERS: PROMOTING WORLD CLASS INNOVATION

OUR TARGETS



Open Innovation



World class innovation



Promoting a new European City model through international tenders

HOW TO RESPOND

→ The French platforms ([Maximilien](#) ; [Entreprises 2024](#) ; [ESS 2024](#))

→ The European platforms ([bulletin officiel des annonces des marchés publics](#) ; [journal officiel de l'union européenne](#))



ESS 2024
LA PLATEFORME SOLIDAIRE



maximilien
LE PORTAIL DES MARCHÉS PUBLICS FRANCILIENS

THANK YOU FOR YOUR ATTENTION

<https://www.ouvrages-olympiques.fr/fr>



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