

OBSERVERS PROGRAMME



International
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OC24

Carbon Management Deep Dive

G- DAY	DATE (DD/MM)	START TIME	DETAIL LEVEL
G 4	30/07	13:00	General

OBSERVERS PROGRAMME



International
Olympic
Committee



PARIS 2024

Carbon Management Deep Dive

Benjamin LEVEQUE, Frédéric LEBRUN,
Florian DILLON, Laure MARCHAND
30/07/2024

In-person participants



Don't leave before session is finished.



The second half of the session will be dedicated to questions and discussion, don't be shy!



Out of respect to the speakers, please limit the use of your laptop to note taking.

Remote participants



Be sure to **turn on your camera** when you want to speak.



Mute yourself whenever you aren't speaking.



Please state your Name, FA and Organisation before you speak or ask a question.



Prioritise talking with your microphone instead of writing in the chat.



If you have any connection issues, reach out to **obp@olympic.org**.

PARTICIPANTS

OBSERVERS PROGRAMME
PARIS 2024



Benjamin LEVEQUE

Climate & biodiversity
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SUS



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Laure MARCHAND

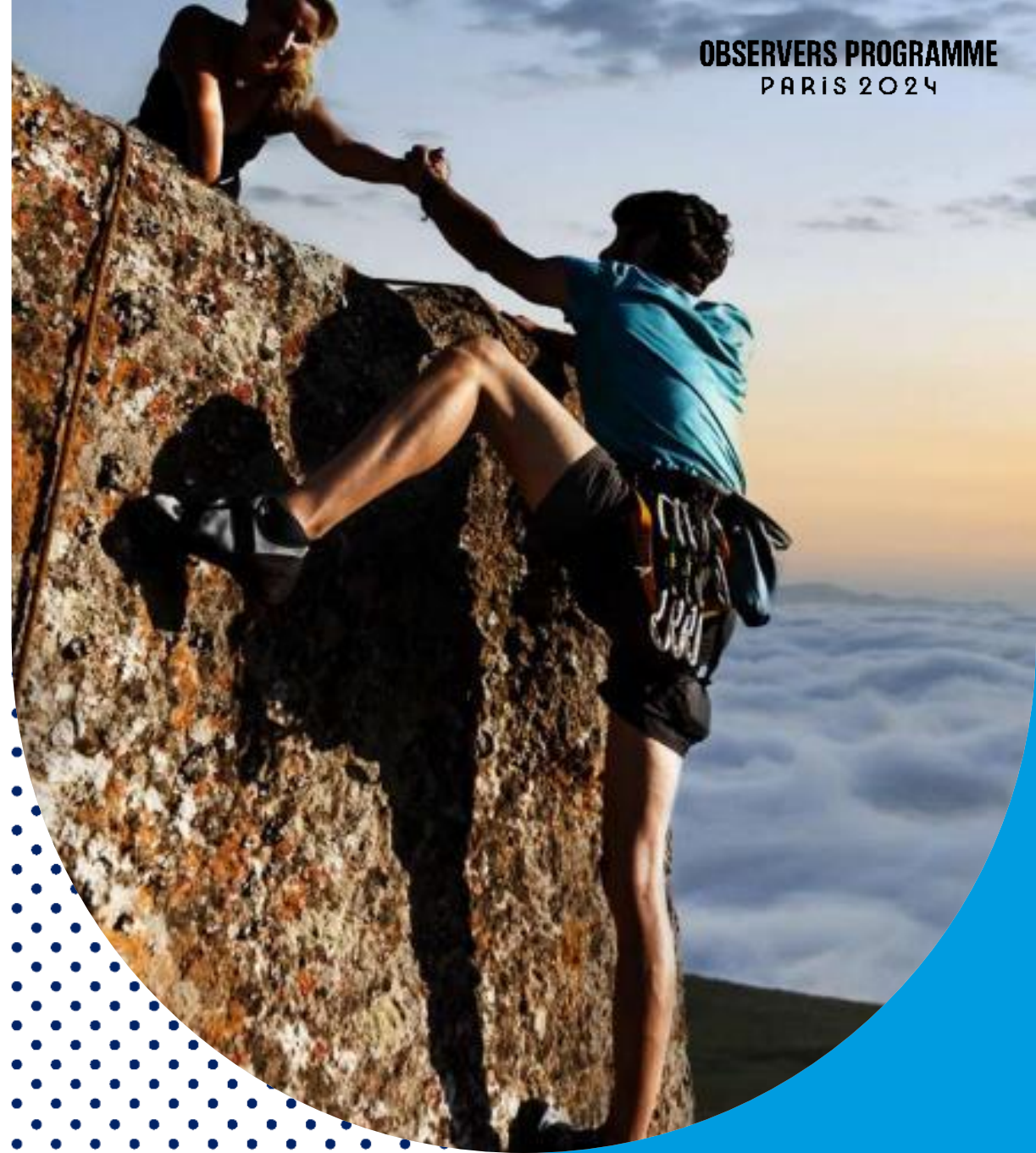
Head of Design Integration
& New Norm

UNI/SUS

Participants will understand:

- The IOC's positioning related to Games contractual requirements.
- Paris 2024 pre-election ambition (i.e. 1.5Mt CO₂e).
- Paris 2024 Carbon strategy (incl. methodology, monitoring, reporting).
- What are the avoidance/reduction measures, as well as internal support/integration and compensation.
- How to use OCOG's influence to facilitate the transition to a low-carbon economy.
- What are the key Games-time operations, i.e. data collection by FAs/ Delivery Partners and SUS.
- What are the key achievements, challenges and recommendations.

1. Introduction
2. Carbon method, including 3 sectorial focuses
3. Paris 2024 successes, challenges & learnings for Future OCOGs
4. Q&A



1

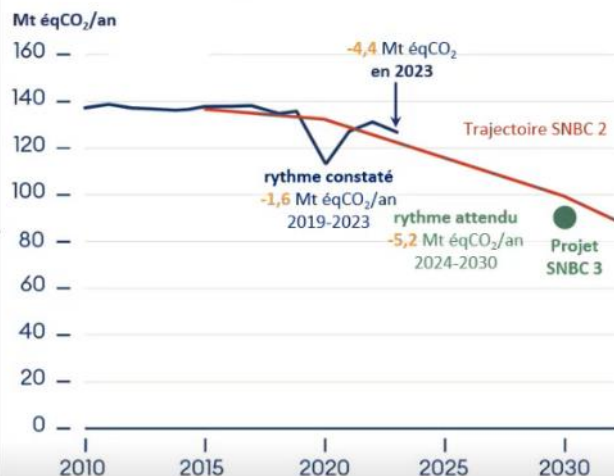
Introduction

Key messages

- Set an ambitious objective
- Start as soon as you can
- Involve as wide and as deep as possible
- Communicate responsibly
- Avoid over engineering
- Do not isolate carbon (teqCO₂ relative simplicity « trap »)

Le secteur des transports entame sa trajectoire de décarbonation après sur les progrès attendus

Émissions du secteur des transports



HAUT CONSEIL
pour le CLIMAT

Source : Citepa (2024)
format Secten

Électrification des véhicules. Aides mieux ciblées pour les véhicules lourds et moins chers nécessaires, notamment dans le marché des véhicules électriques d'occasion.

Politiques de report modal qui n'ont pas encore montré leurs effets, avec un manque d'investissement dans les transports collectifs, et un manque de cohérence d'ensemble.

Changement d'échelle rapide nécessaire pour électrifier et décarboner les flottes de transport de marchandises.

Rythme de baisse des émissions attendu d'ici 2030 **3x** plus rapide que le rythme de 2019-2023.

Marion Guillou



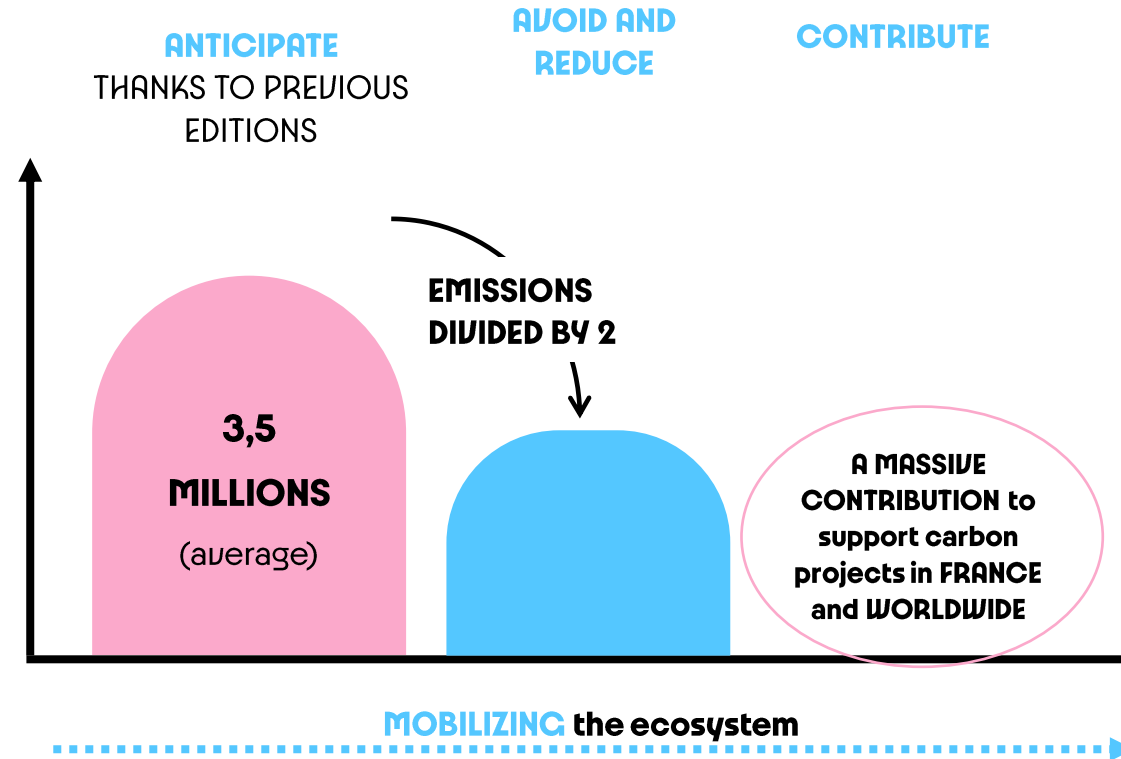
<https://press.paris2024.org/news/press-release-paris-2024-presents-the-latest-advance-in-its-low-carbon-strategy-175c-7578a.html>



Carbon method

Our method

ANTICIPATE
AVOID
REDUCE
CONTRIBUTE
MOBILIZE



ANTICIPATE

AVOID

REDUCE

CONTRIBUTE

MOBILIZE



Evaluate a carbon impact

**IMPACT
CARBONE**
(*teqCO2*)

=



x



↑
*Spécifique
aux activités*

↑
*Bases de
données*

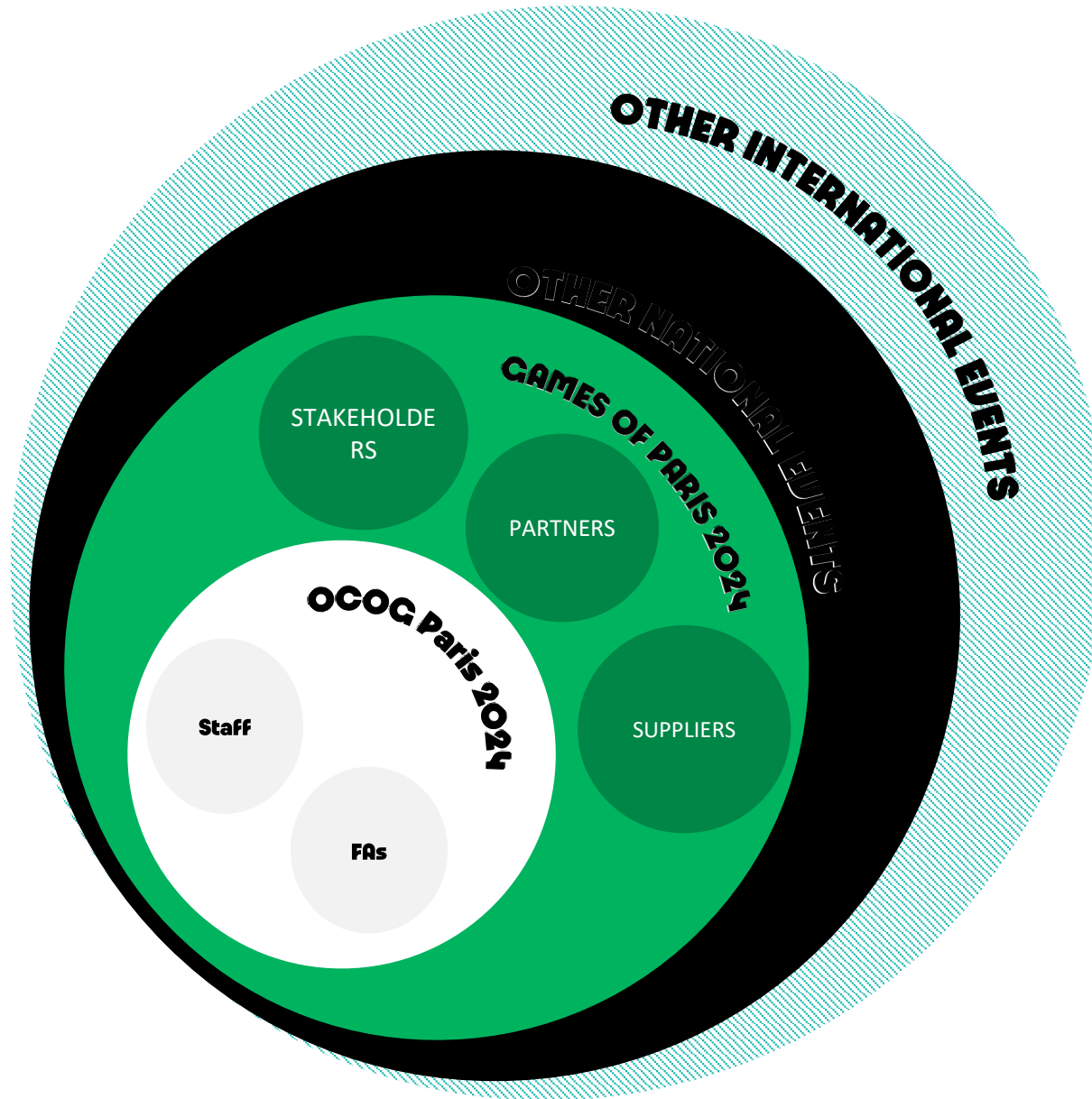
IOC methodology

- 28 emissions categories
- Consistency with international norms

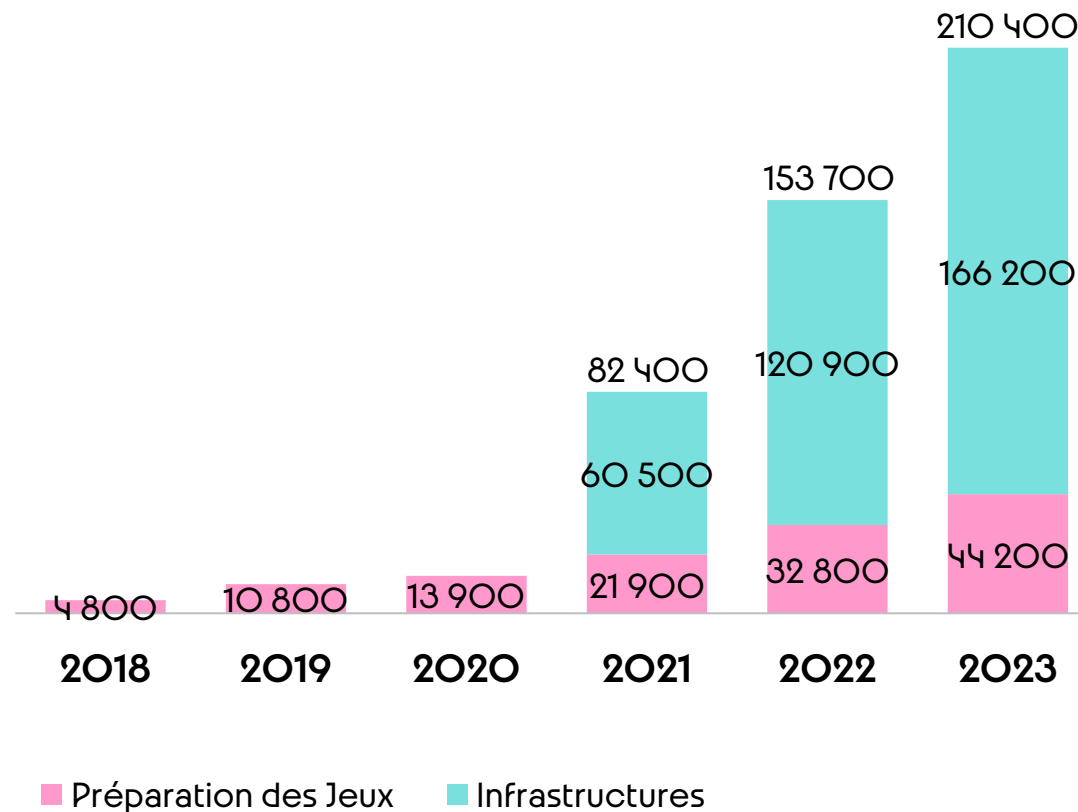
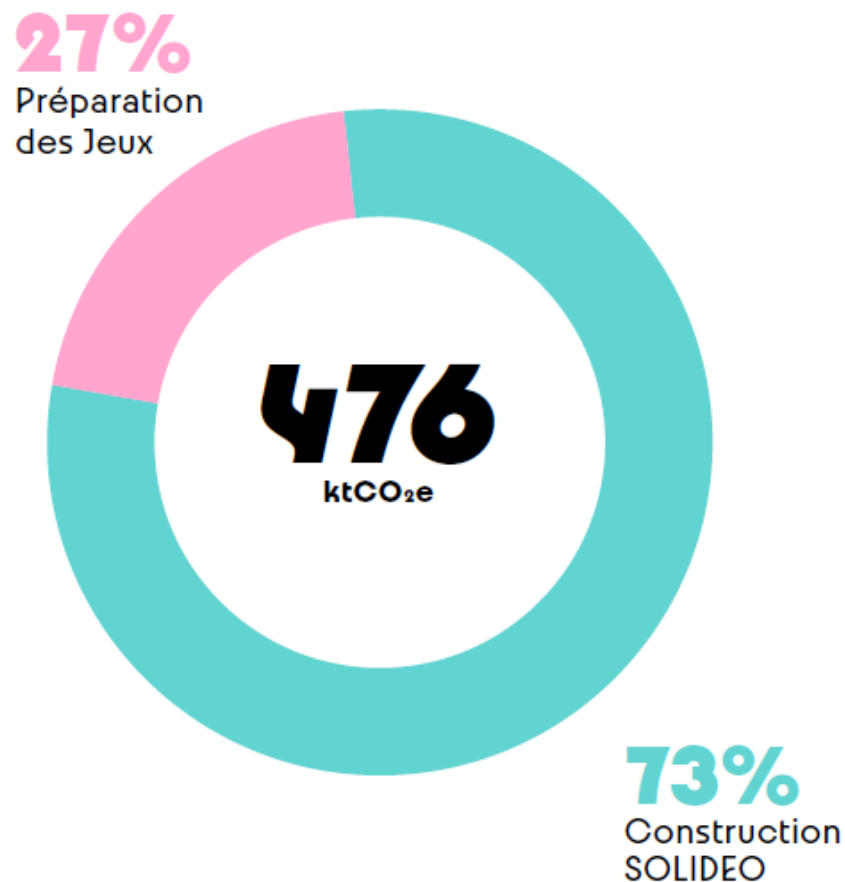
Carbon budget monitoring
(predefined objective for each activity)

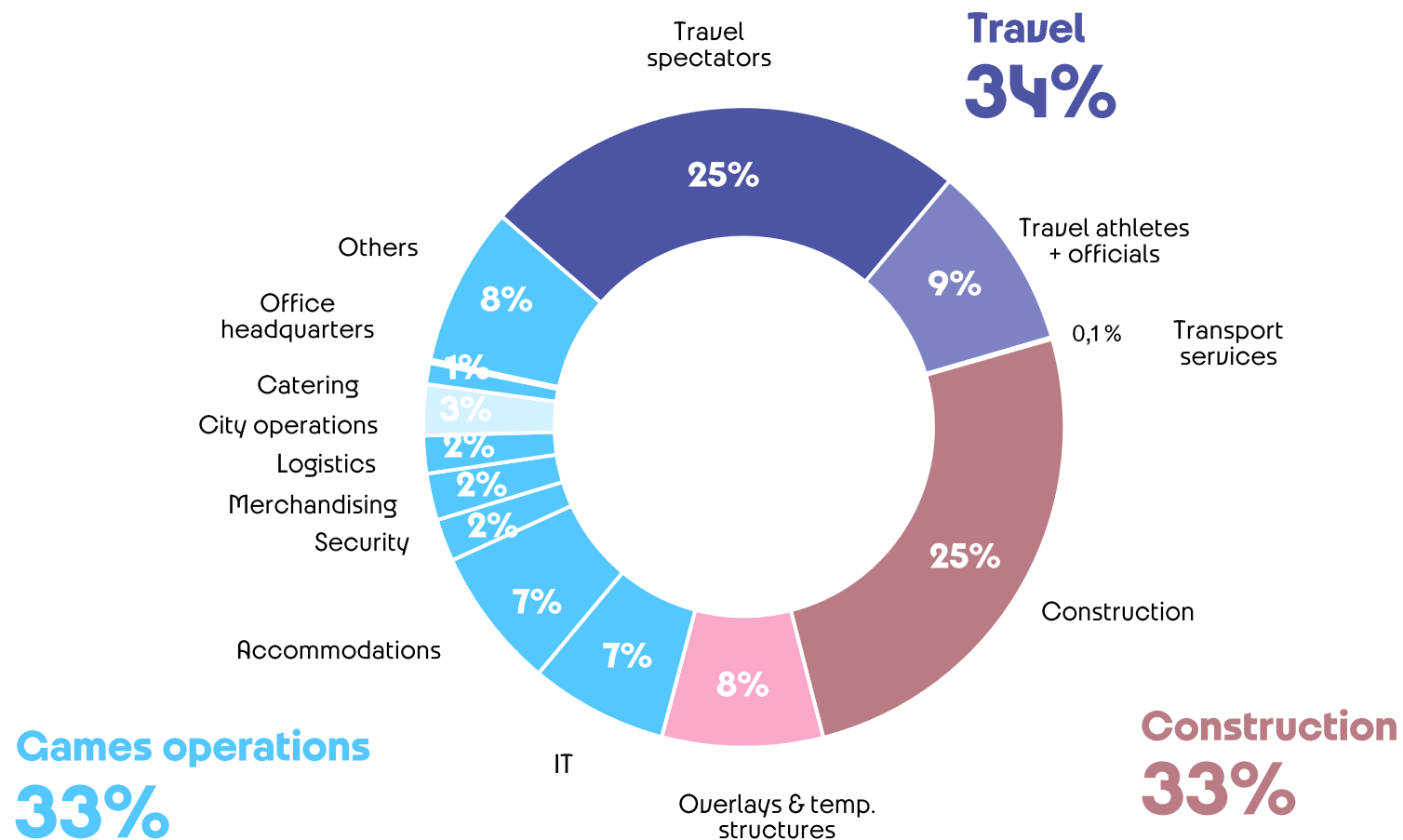
ADEME **Emission Factors**

Dedicated monitoring tool
(10 000 datapoints)

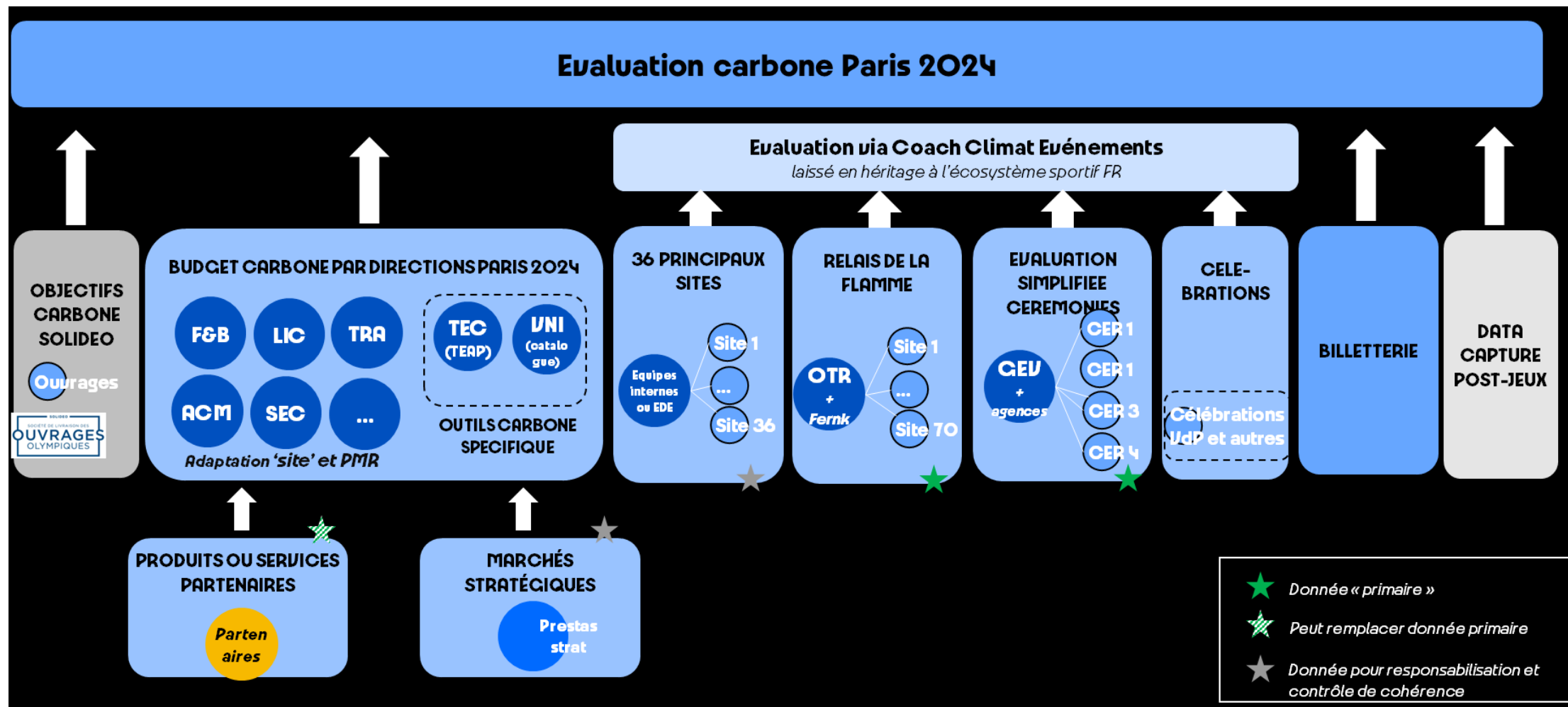


2018-2023 emissions





Data collection architecture



Paris 2024 carbon tool

TOVALU

Connexion

Adresse e-mail

Mot de passe

Mot de passe oublié

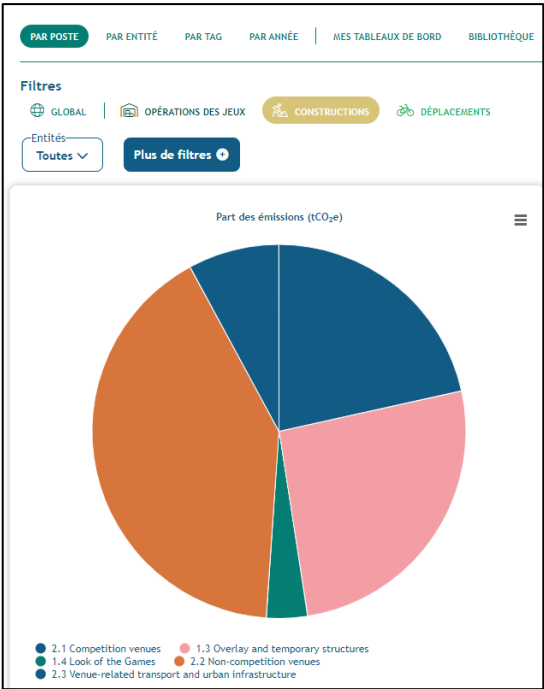
☐ Se souvenir de moi

Me connecter via SSO

Me connecter

A celui qui ne sait pas vers quel port il navigue, nul vent n'est jamais favorable.

Sénèque



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REDUCE

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MOBILIZE

AVOID AND REDUCE – Energy



Frédéric LEBRUN
Associate technical
director, venues and
infrastructures
UNI/NRG

3 AMBITIONS ÉNERGIE POUR LIMITER L'EMPREINTE CARBONE

1

ARCHITECTURE

Alimenter par les réseaux électriques tous les sites des Jeux avec une alimentation de chaque site par deux postes de livraisons HTA alimentés par au moins deux postes sources distincts.

Maximiser l'utilisation HTA et BT des sites existants.

En conséquence, faire évoluer et/ou redonder autant que besoin les infrastructures existantes.

2

FOURNITURE

Utiliser une électricité 100% issue de sources renouvelables.

Optimiser la consommation d'énergie électrique

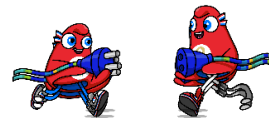
Eviter le démarrage des solutions d'ultime secours (usuellement groupes électrogènes à énergie fossile

3

INNOVATION

Faciliter le développement de solutions d'énergie temporaires différentes afin d'éviter d'avoir à recourir à une solution fossile en ultime secours.

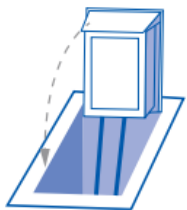
INNOVATIONS AVEC ENEDIS



UNE VITRINE POUR ACCÉLÉRER NOS DÉMARCHES INNOVATIONS :

1

Activité Nouvelle
Bornes Événementielles



2

Activité Nouvelle - GE ZE Batterie

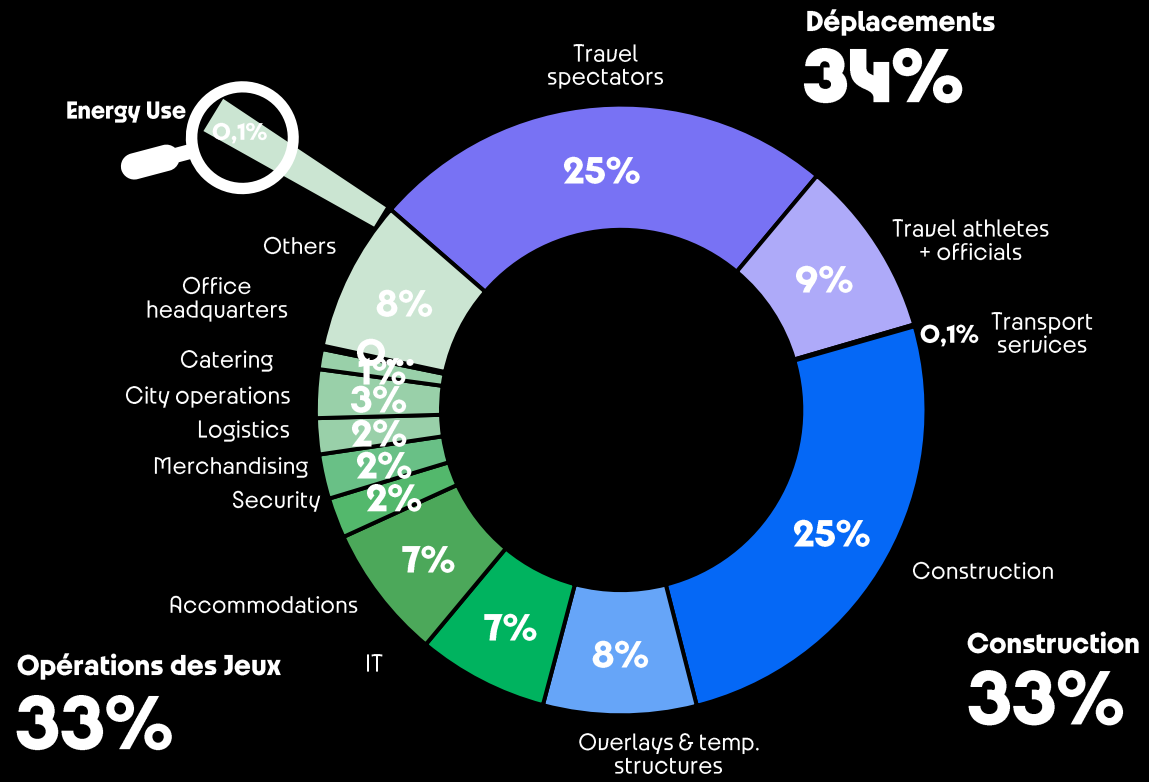


3



Espace Mesures
et Services (EMS)

LE BUDGET CARBONE ENERGIE DES JEUX



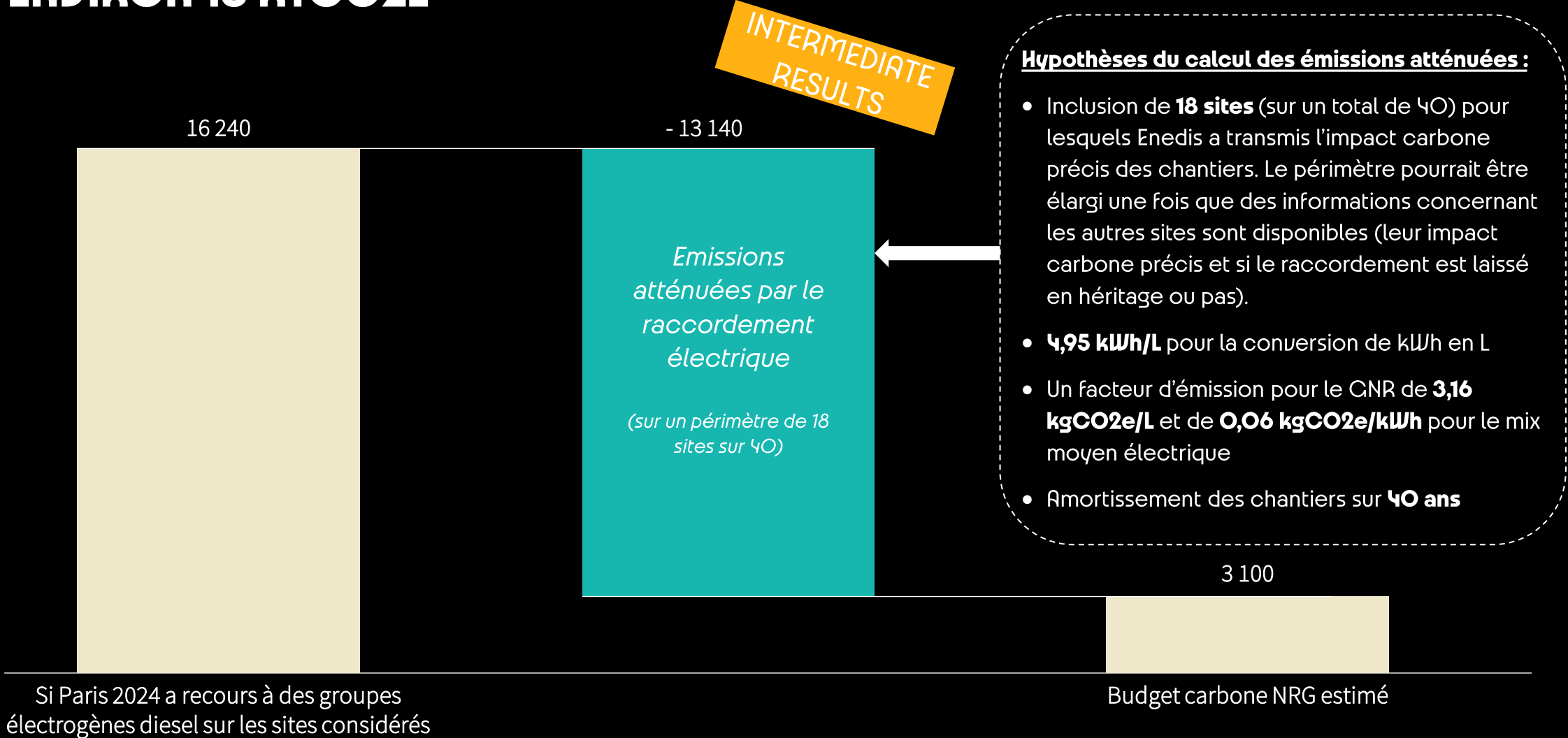
Direction Energie

0,1% du budget global
soit 3 100
teqCO2

INTERMEDIATE RESULTS

Note : La réestimation du budget carbone de Paris 2024 est en cours. Pour cette raison, l'estimation de chaque FR peut encore évoluer. Seulement la mesure réelle après Jeux sera définitive

LE RACCORDEMENT ÉLECTRIQUE PERMET D'ATTÉNUER LES ÉMISSIONS D'ENVIRON 13 KTCO2E



Note : La réestimation du budget carbone de Paris 2024 est en cours. Pour cette raison, l'estimation de chaque FR peut encore évoluer. Seulement la mesure réelle après Jeux sera définitive

AVOID AND REDUCE – Technology

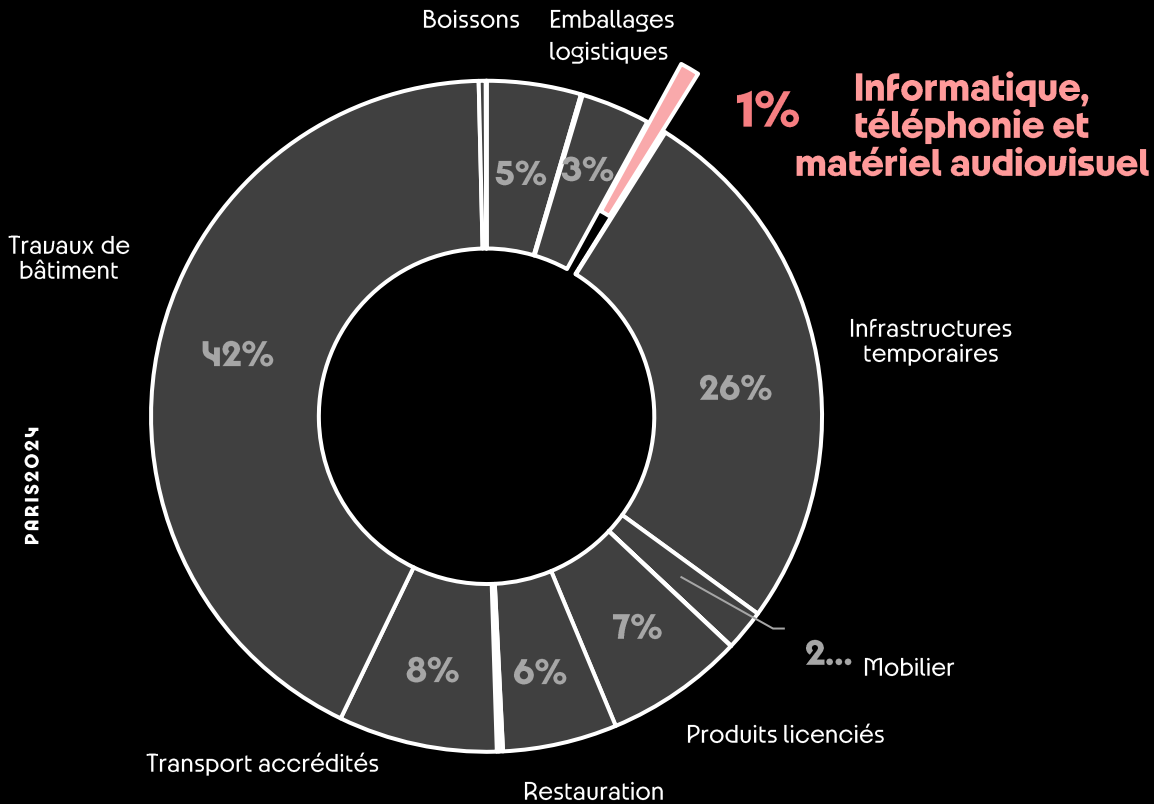


Florian DILLON

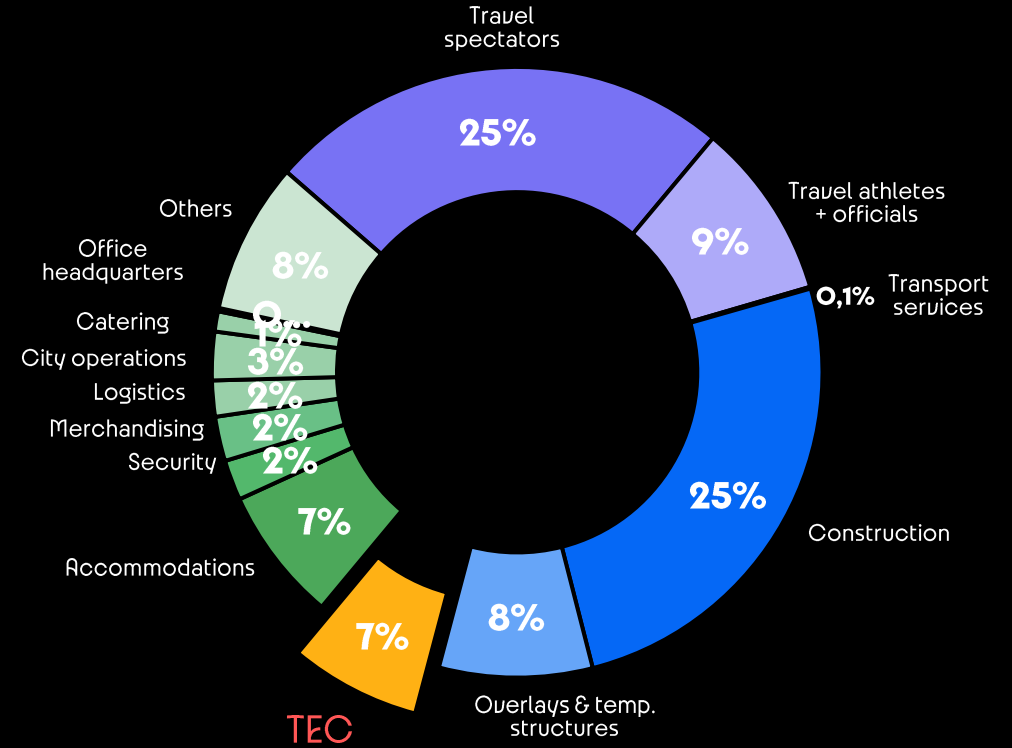
Sustainable IT
manager

TEC

Significative weight within the carbon footprint



Ressources (T)



Carbon

3 PILLARS

1

MESURE

- Orders of magnitude
- Carbon footprint
- Material footprint

2

REDUCE

- Purchasing
- Volume optimization
- End of life
- Software eco-design

3

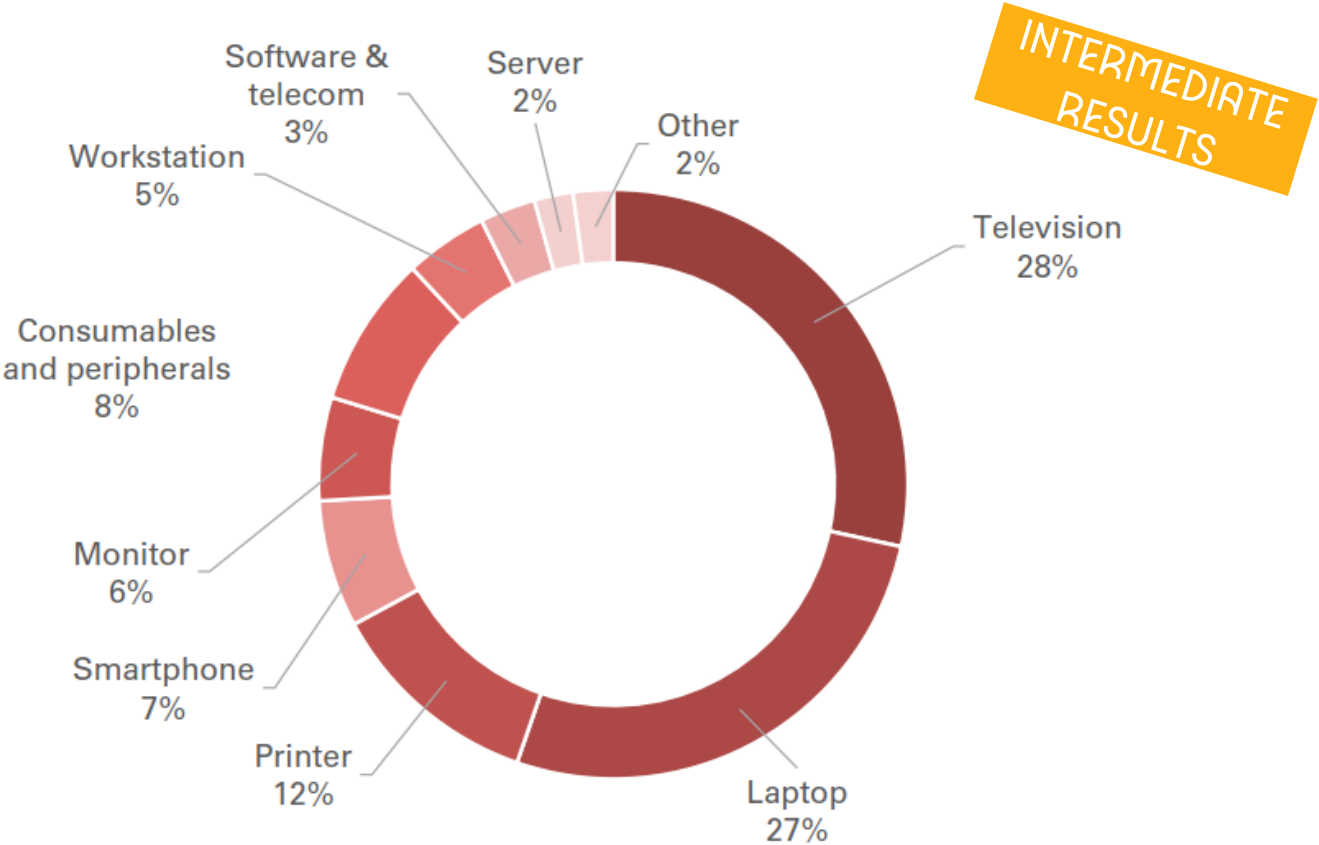
MOBILIZE

- Raising awareness
- Acculturation
- Collaboration with partners
- Heritage



TEAP v2 footprint - "Purchase of new equipment" scenario:

Emissions related to P24 catalog products
Scenario: Purchase of new equipment



- End-of-life emissions are excluded since Paris 2024 resells end-of-life equipment
- All manufacturing-related emissions are included

Televisions and laptops are the main emission sources for Paris 2024 ; with **2,775** and **2,628 tCO₂eq** respectively. Therefore, this are the equipment to prioritize to have a significant impact.

- 7845 TV
- 10 579 Laptop
- 2 452 Printer

Top 10 products :

Product	P24 Product Category	Rank	Share of emissions
55ITT	Television & Monitors	1	21%
BOSGL	Computer Equipment	2	11%
SPWSM	Mobile	3	6%
GOTNL	Computer Equipment	4	6%
CISCK	Computer Equipment	5	5%
24MNO	Television & Monitors	6	3%
SAMEV	Consumer AV	7	3%
OSCBW	Computer Equipment	8	2%
22MNO	Television & Monitors	9	2%
OBSLW	Computer Equipment	10	2%



5 KEY COMMITMENTS

→ **1. AT LEAST 70% OF THE EQUIPMENT WILL BE RENTED OUT**

au sein du parc d'équipements déployés pendant les Jeux.

→ **2. 100% OF EQUIPMENT PURCHASED WILL HAVE A SECOND LIFE**

à l'issue des Jeux (reconditionnement ou réemploi).

→ **3. ECO-DESIGN OF APPLICATIONS FOR THE GENERAL PUBLIC**

les plus fréquentées (Billetterie, Club Paris 2024, site paris2024.org, Games Time Web & App), ainsi que de l'application de gestion des déplacements des populations accréditées (250 000 personnes).

→ **4. RAISING AWARENESS AMONG EMPLOYEES AND THE PARIS 2024 ECOSYSTEM**

aux enjeux environnementaux et sociaux du numérique.

→ **5. SUSTAINABLE IT CRITERIA IN 100% OF TECHNOLOGY TENDERS**

de Paris 2024, avec une pondération minimum de 10% pour les applications, et 20% pour les équipements.

AVOID AND REDUCE – Temporary (infra)structures



Laure MARCHAND SANTANA

Architect

Head of Design Integration & New Norm

UNI/SUS

Architecture differs from construction in that architecture brings a particular dimension of thinking and planning on the part of the designer, as he considers the entire life cycle of a construction.

AVOID AND REDUCE – Temporary (infra)structures

VENUES MAP BASED ON EXISTING OPORTUNITIES, LEGACY FOR LOCAL POPULATION & COMPACTITY OBJECTIVES

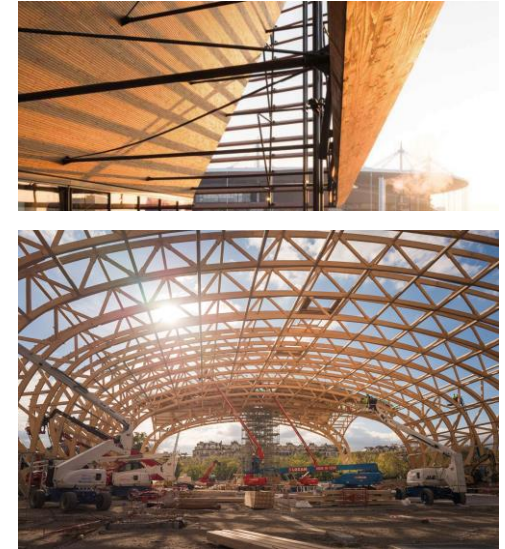
Only 1 competition venue built for the Games

> The Aquatic Center, made for legacy for Saint Denis population

Only 1 temporary building with heavy structure to support its roof for indoor sports

> The Grand Palais Ephemère, which mainly hosted and will host Grand Palais events during the renovation of the Grand Palais itself

**Same total number of Olympic Venues that London 2012
but hosting 8 sports more than the 2012 edition**



DETAILED PROGRAM BASED ON FRUGALITY OBJECTIVES, FA'S SUSTAINABLE STRATEGIES,
RESEARCH OF ADAPTATION TO CLIMATE CHANGE, UTILIZATION OF SPACES OVER TIME

> 160 000 m² / +220 000 seats

OVERLAY SOLUTIONS CHOICES BASED ON STRONG LOCAL SOURCING CODE WITH OBJECTIVE OF ZERO
PRODUCTION OF OVERLAY SPECIFICALLY MADE FOR GAMES, IDENTIFICATION OF INNOVATIVE COMPANIES
(INCLUDING SME INVOLVED IN SOCIAL AND SOLIDARITY ECONOMY) & FOCUS ON BIODIVERSITY PRESERVATION

SUSTAINABLE DESIGN GUIDE

STRATEGY

VISION

IOC NEW NORM

P2024 Sustainable
Design guide

Definition of the vision and development of the environmental approach for overlay.

*Ex : Pillars of sustainable design at each scale of the project (territory, city, venue); determination of 4 categories of venue. Indicators : **carbon**, circularity, biodiv, pollution + € + level of services)*

APPLICATION TOOLS

VNI
Catalogue

Generics
AAM + CEG

Venue specifics (VDB)
Drawings, AAM & BOQ

Carbon value of overlay items and final choice of the items with the FAs per functional area and per venue

APPLICATION

1) INTERNAL ARBITRATION

- GAME exercise to define the **level of services** (ex : thermic comfort)
- Carbon estimations for **P24 arbitration** (ex : wooden structures)

2) SUPPLIERS PERFORMANCE

- **Strategic Markets** : Overlay, Energy, Event Delivery Model, General contractors...
- **Venue specific markets** : IBC, Megastore, floating pontoon ALX III, occultation GRP...

3) ENGAGEMENT

- **Training** for staff : Educational Day
- Coordination with **key players** : IOC, IOC Partners, France Bois 2024, ESS 2024, ...
- **Sharing** and training with other stakeholders (through CTY, CEL...)

UNPUBLISHED P24 RESULTS...

INTERMEDIATE
RESULTS

REDUCE THE NEEDS

- > **Reviews of some key parameters with International Federations and IOC stakeholders** (e.g : focal point, depth of roof, composition of FOP, UVH lounges, commentary positions, ...)
- > **Mutualisation of operational area** (e.g : UMC/Conf)
- > **Catering in ext. areas / all queuing in ext. areas ...** (generic concept of maximum use of external delimited areas)
- > **Water control and reduction measures** (in the toilets, for FOP maintenance, ...)
- > **Waste of dry and autonomous toilets collected and treated**, and all other types of toilets rationally allocated
- > **80% of HVAC with new solutions promoted** (A+++ and R32 gaz) and 2 types of HVAC thermic comfort (delta in between int. and ext. or target temperature)
- > **- 60% of carpet** (-222 teq CO2), limited in FOP area (made viable thanks to the determination of 3 level of casset floorings and well allocated)
- > ...

...must become new standards

CONSIDER EXISTING RESSOURCES

- > **No tribune made for the games** (relevant choice of deployment of the diferent tribunes available)
- > **Permission of deployment of existing overlays of + 5 years old** in order to maximise the use of existing stocks
- > **Choice of distincts overlays based on a distinction in between FOH and BOH**
- > **40% of spectators area in wooden structures** from SME
- > **Less concret ballast while reuse of concret train existing monoblocs** (-400 teq CO2)
- > **Local small suppliers** for Tahiti, football cities...

GUARANTEE THE LIFE CYCLE OF MATERIALS

- > **Rented material which must be taken back by the suppliers and returned to stocks**
- > **Contract with a specialist of reuse material** in order to stock and redistribute material that cannot go back to the stocks of overlay suppliers because they have been too transformed
- > ...

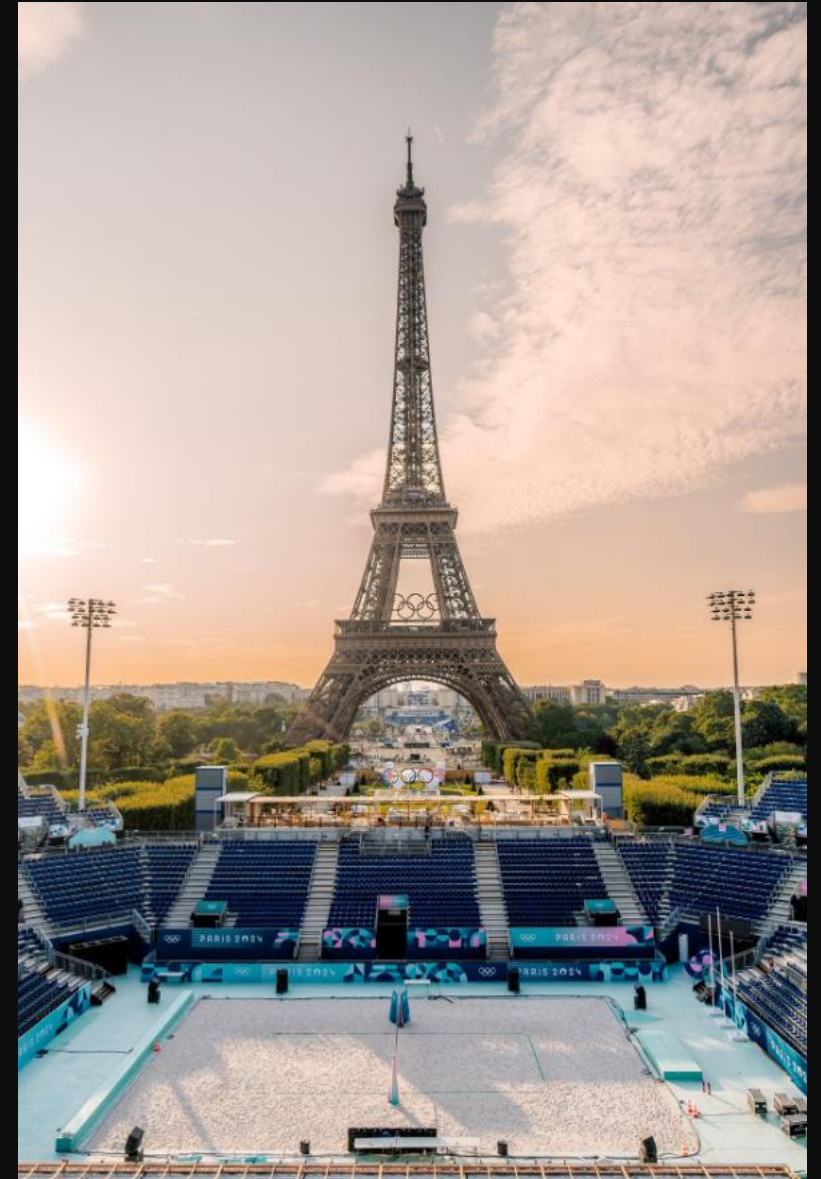
PHOTOS



PHOTOS



PHOTOS





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REDUCE

CONTRIBUTE

MOBILIZE



<https://www.youtube.com/watch?v=g3kw-jm9JOc>



Schneider
Electric

SUPPORTEUR OFFICIEL
EN PROJETS DE CONTRIBUTION
CLIMAT AVEC ECOACT



▶ ▶| 🔊 0:00 / 1:38

⏸ ⏴ ⏵ ⚙ 📺 🖥

https://www.youtube.com/watch?v=7IMBrFW_JHU

Paris 2024 climate contribution projects

- IMPROVED COOKSTOVES
- ACCESS TO WATER
- RENEWABLE ENERGIES
- FOREST
- MANGROVE



Montmorency

Pierrelaye-Bessancourt

Stade de
France







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AVOID

REDUCE

CONTRIBUTE

MOBILIZE

4 CARBON TOOLS DEVELOPED BY PARIS 2024

2019

Paris 2024 carbon tool

2021

Coach Climat

2023

Coach Climat Partenaires

2023

Coach Climat Événements

CIBLE	OBJECTIF	ECHELLE	ILLUSTRATION
Internal organization	Managing Paris 2024's carbon budget to achieve its objectives → DELIVERY	Organization	
Internal staff	Offer Paris 2024 employees the opportunity to estimate and understand their carbon footprint and support them in reducing it, both in their professional and personal lives. → MOBILIZATION	Individually	
French partners staff	Offer the organizations in our ecosystem a turnkey tool to mobilize their employees for the climate, specific to their company. → MOBILIZATION	Individually	
All French sports event organizers	Enable all sports event organizers to estimate the carbon impact of their event and identify the 1st concrete actions to reduce it. → MOBILIZATION - LEGACY	Event	



<https://www.coachclimatevenements.org/>



L'outil pour s'engager
vers un sport bas carbone



Rejoignez le mouvement des acteurs engagés
pour des événements sportifs **plus responsables** !

Le Coach Climat vous accompagne pour
estimer et comprendre les émissions CO₂ de
votre événement, et surtout les **réduire**, grâce
à un plan d'entraînement sur-mesure.

☐ J'accepte les [Conditions générales d'utilisation](#) du Coach Climat

☐ J'ai pris connaissance des [Mentions légales](#)

[Je m'inscris ou me connecte](#)

PARIS2024

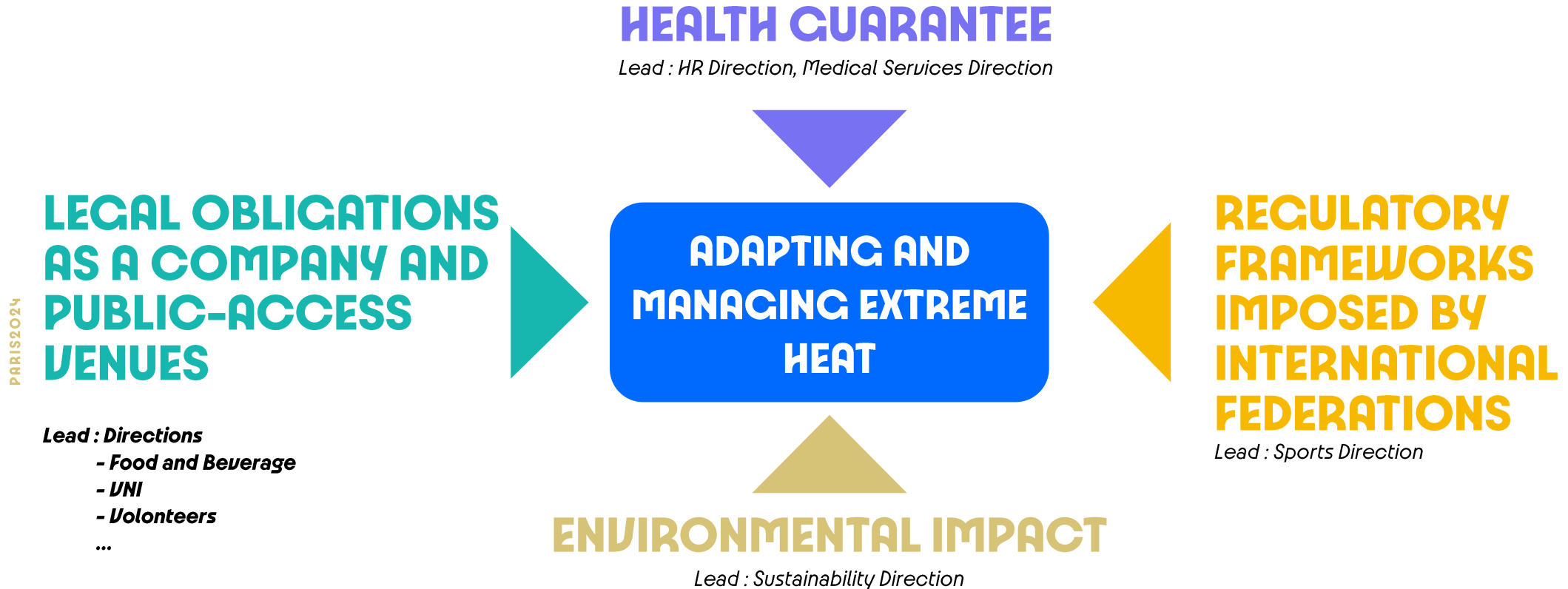
Soutenu
par



BEFORE THE CONCLUSION, A QUICK LOOK ON ADAPTATION



FOUR FACTORS TO DEAL WITH



Environmental performance can challenge comfort levels while keeping health guarantee as a priority

CONFIDENTIEL



PARIS 2024 SUCCESSIONS, CHALLENGES & LEARNINGS

Successes

- **Our results on all aspects**

- Reduction
- Contribution
- Mobilization

-30% on building

-50% on food

-80% on energy
(and more coming)

**A decarbonated cauldron as a
symbol of our Games**

**+ 1 100 events
used our
Climate
Coach tool**

**13 offsetting
projects
worldwide**

Training for colleagues
(climate coaching)

**+ 500 colleagues
used Coach Climat
(indiv version)**

Joint-teams between SUS
and the different FRs (TEC,
NRJ, UNI, FNB, LIC, OTR ...)

**50 carbon
referents**

Joint-efforts with
eco-system

**Solideo,
Sponsors...**

Challenges

and opportunities for next OCOGs

- To find the right balance between need for transparency and availability of qualitative data at different stages of the OCOGs life
- To find the level of technology integration : from excel to IA ?
- To exploit the potential to go further with (some) Sponsors and HSP
- To address the « next issues » to reduce climate impact : Size, international travel
- To communicate, to communicate, to communicate...



Q&A

ANY QUESTIONS?

Housekeeping rules reminder:

1. Raise your hand if you want to intervene (both in person and virtually).
2. Wait until you are given a microphone before you speak.
3. State your name, FA and organisation before you speak or ask a question.
4. Respect speaking turns to optimise the experience for remote participants.



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MERCI

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WE WANT TO HEAR FROM YOU!

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At the end of the activity, your Activity Coordinator will show a QR code to complete a feedback survey.

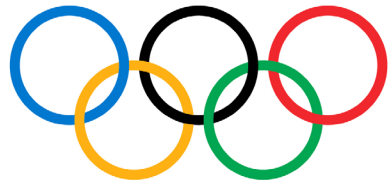
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Please note that this feedback is anonymous and will be used solely for improvement purposes. Thank you for your honest feedback.



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