

# Nation Data Center

The French Data Center provider  
committed for a sustainable  
digital industry



# Data centers pose real climate challenges

# 2.5%

of global carbon emissions are generated by data centers  
→ ADEME

# 1.57

was the average data center PUE\* rating in 2022  
→ Uptime Institute

# 1.5%

of the world's electricity is consumed by data centers, and this could rise to 10% by 2030  
→ Agence internationale de l'énergie

\*Power Usage Effectiveness

# 1

old-generation data center



# 600,000

cubic meters of water per year



# 6.5

Olympic swimming pools per day

→ Greenly Institute

# Editorial

## Building the future of digital today.

16%: that's the percentage contribution of data centers to the total carbon footprint of the digital industries in France. It's a staggering figure. We are facing an unprecedented climate challenge that must be seen for what it really is: a global emergency. Limiting the environmental impact of data centers to help reduce global warming is a non-negotiable imperative.

And because we believe that a less energy-hungry digital world is achievable, we've envisioned what the data centers of tomorrow could look like. We've questioned, researched, rethought and put in place the foundations for what we believe will be the new generation of digital infrastructures: transparent, sustainable and local with no compromise on quality.

### Nation Data Center was founded.

The French data center provider committed for a sustainable digital industry.

**Innovative structures where different entities and their data coexist in a sustainable co-location environment.**

The central focus will be on location and eco-design as the route to reconciling interpersonal contact with the challenges of tomorrow. Step by step, we are working alongside you to build data centers that not only meet the latest tech and environmental specifications, but also adapted to the challenges we face.

A sustainable digital industry that drives progress and protects our future, right here and right now.



**Ludovic Castillo**  
Chairman of Nation Data Center

# Nation Data Center, The French data center provider committed

## for a sustainable digital industry

We design, build and operate data centers that successfully reconcile economic challenges with environmental sustainability.  
The way we see it, our business is built on three pillars:

1.

### RESPONSIBILITY

Eco-responsible design that balances technology with ecology.

Our data centers meet the highest standards of physical and digital security, not to mention the latest commitments to environmental responsibility. Low carbon by designed and operation, they prioritize the use of energy from renewable sources and consume zero water.

2.

### SOVEREIGNTY

Sovereign housing to protect your data.

Acutely aware of just how sensitive our customers' data can be, we are convinced of the importance of having a sovereign physical location. We are a French company that operates only in France, which means that our infrastructure is impervious to extraterritorial laws.

3.

### LOCAL PRESENCE

A policy of local presence focused on people and communities.

To provide housing and support that's as close to you as possible, our goal is to build a network of fifteen 100%-French data centers between now and 2030.

THE +

Our technologies give us detailed control over our energy expenditure, which means positive financial benefits for our customers.

# NDC is a subsidiary of Altarea Group

Leading the way in low carbon urban transformation since 1994

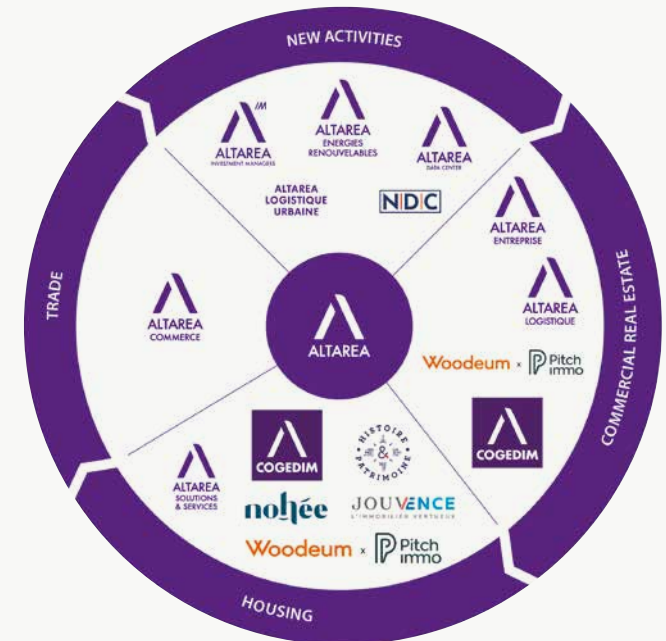
## Altarea expertise →

### EXPERTISE IN MULTI-PRODUCT

Offices  
Homes  
Retail  
Logistics  
Hotels  
School

### EXPERTISE IN MULTI-CUSTOMER

Personal customers  
Institutions  
Corporates  
Global brands  
Local authorities



# 2,000

real estate experts

# €2,7 billion

in annual revenues for 2023



# Assured high-security, tailormade IT housing

EXPERIENCE THE HIGHEST QUALITY STANDARDS WITH NATION DATA CENTER.

## Security certified at the highest level

24/7 defense in depth, internal/external video surveillance, security guards, single-person portals, ANSSI-compliant 2-factor authentication and a 3.5-meter-high fence to prevent any physical intrusion into our infrastructure: our data centers are fortresses designed to guarantee an extremely high level of physical and digital protection for your data.

## Tailormade colocation

Private cage, dedicated room, storage space and super-high density: our modular 1,000 to 2,000 m<sup>2</sup> data centers offer every option to accommodate your housing infrastructure development needs.

## Diverse connectivity

Our data center meet-me-rooms enable cross-connection with a range of ISPs and cloud service providers

**“When it comes to IT housing, we fully understand the importance of maximum security, which is why all our facilities will be certified ISO 27001 and HDS compliant.”**



ERIC ARBARETAZ,  
→ Nation Data Center Cofounder & Chief Technology Officer

# Aligning our services with your needs

WHAT IF YOU COULD USE A DATA CENTER CLOSE TO YOU?

## Local presence

Our on-site operations teams can carry out a wide range of hardware-related tasks locally on request.

## User experience

With their dedicated living and working spaces, our data centers are designed to meet the needs of your teams as closely as possible. The spaces within this feel-good working environment can be privately allocated to your needs at any frequency from on-demand to year-round.

## Support

From housing optimization and advice on server usage rationalization to helping you hit your CSR targets, our approachable expert teams are there to support and assist you at every stage of your data operations.

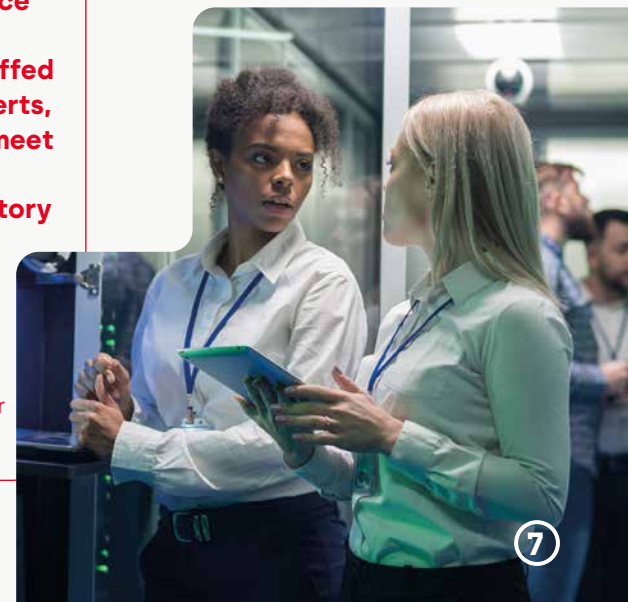
## Flexibility

We understand that you need to size your space to align with your cost and operational efficiency imperatives. Providing every customer with a tailormade design and billing solution is embedded in our DNA.

**“Your challenges are our top priority! Our ambition is to offer you a premium quality service that solves your problems. With local data centers staffed by teams of committed experts, our network is designed to meet your specific needs in strict compliance with the regulatory framework that applies to your business.”**



YANN PARAT,  
→ VP Sales  
at Nation Data Center



# Sparking an eco-responsible revolution

## revolution

ARE YOU READY FOR  
A MORE ENERGY EFFICIENT AND  
SUSTAINABLE DIGITAL FUTURE?

The challenge of the century: reconciling technological progress with environmental concerns. Successfully addressing this urgent crisis by designing and operating more eco-respectful data centers is the beating heart of our concept.

Our concept is all about

**100 %**

decarbonization  
at every link in  
the value chain

**This commitment is actioned through 5 key principles applied at every stage from construction through operation:**

### 1. DECARBONIZATION IN CONSTRUCTION

From the earliest phase of construction onwards, we implement a broad spectrum of processes, from using responsibly sourced timber to worksite waste management, to build centers that achieve new levels of sustainability. We also build on existing resources by reusing and recycling construction waste and materials recovered from brownfield sites.

### 2. USING CLEAN ENERGY

Because energy from renewable sources is the future for all of us, we prefer to sign a long-term Power Purchase Agreement (PPA) with a renewable power generator or use locally generated renewables. We favor solutions such as:

**GEOTHERMAL** → heat energy extracted from underground  
**FREE COOLING** → the use of cool external air

Our aim is to ensure that:

**100 %**

of the energy used in our data centers is generated from renewable sources.

### 3. LOWER ENERGY CONSUMPTION

How do you keep a data center running continuously, at the same time as controlling its energy consumption? That's the challenge we've accepted and taken action on by specifying high-performance thermal insulation and electrical infrastructure materials, and through mindful management of consumption and resource optimization.

### 4. WATER RESOURCE PROTECTION

Water is a more precious resource today than at any point in the past. At a time when US-based international data centers are consuming 16 billion liters of water every year, we refuse to install water-consuming technologies like adiabatic systems to cool our facilities.

In an old-generation data center,

**1.57 kWh**

of incoming power is required for every watt of power consumed by data processing operations.

The figure for an NDC data center is

**1.2 kWh**

### 5. WASTE HEAT RECOVERY

Data centers inevitably generate heat as a direct result of ensuring that IT systems run smoothly and continuously. In France, only 2.6% of the valuable resource represented by this heat is recovered; the rest is simply wasted. Wherever possible, we investigate opportunities for channeling heat that would otherwise be wasted to the district heating systems that serve local authority swimming pools and homes, for example. Waste heat recovery is a process that involves multiple stakeholders.

**"A sustainable data center: mission impossible? We don't believe that: the way we see it, it's our responsibility to work towards energy efficiency and low carbon emissions by taking practical action."**



MATHIEU HULOT

→ Energy and Carbon Manager at Nation Data Center



**For 2025**

## Our focus are set on Normandy and Brittany

### NDC Normandy

Where?  
Val-de-Reuil  
within 100 km  
of Paris, 30 km  
of Rouen  
and 110 km of Caen

Formerly a bank data center, NDC Normandy is located in a large industrial park. Our repurposing and upgrading project has been specifically designed to offer you a range of IT housing solutions that align with your business and its needs.

**2,000 m<sup>2</sup>** of IT space    **250 m<sup>2</sup>** of office space

**10 MW** of IT power    **1.2** de PUE

**99.982%** availability rate

#### The sustainability credentials of NDC Normandy:

- Geothermal cooling as the main source of cooling
- Heat recovery and reuse to heat homes and public buildings in Val-de-Reuil

### NDC Roazhon

Where? Noyal-sur-Vilaine, 10 km from Rennes

NDC Roazhon is located in an ultra-dynamic area of Brittany close to France's cybersecurity capital, and boasts the very latest production infrastructure security technologies. A major local resource for IT housing services that are as efficient as they are virtuous.

**1,000 m<sup>2</sup>** of IT space

**3 MW** of power

**99.982%** availability rate

**250 m<sup>2</sup>** of office space

**1.2** PUE

#### The sustainability credentials of NDC Roazhon:

- Free cooling via an air handling unit (N+2)
- Chilled water production for the summer period (2N)

### NDC NORMANDY AND NDC ROAZHON

## Two data centers that successfully align high performance with eco-responsibility

#### → SECURITY

- SIAAP-accredited security guards and fire safety officers on site 24/7
- In defense in depth with 3.5-meter-high fencing and perimeter detection system
- Video surveillance of all internal and external space
- Single-person portals and ANSSI-compliant 2-factor authentication (including biometrics)

#### → COOLING

- Tier 3 design (EN 50600 compliant), 2 cooling plants and redundant cooling systems
- Zero water consumed by the cooling process
- CONNECTIVITY
- Tier 3 design (EN 50600 compliant), 2 meet-me-rooms with multiple redundant inputs with no SPOF

#### → POWER

- Tier 3 design (EN 50600 compliant), entire site supplied by a high-availability loop, two redundant generator sets (2N) and two AC supply lines (2N)

• Photovoltaic power generation over 100% of the data center surface area

CERTIFICATIONS TARGETED  
ISO 27001 - HDS - ISO 14001



[nationdc.fr](http://nationdc.fr)