



GLOBAL CITY FOCUS ROTTERDAM

Unique in the Netherlands, Rotterdam’s dramatic skyline highlights its transformation from its blue-collar, port city roots to a modern high rise metropolis connected to the largest port in Europe. Ciara Walker, Willem Hoes and Freek Wullink of Arcadis explore the transition to a creative, innovative knowledge economy.

INTRODUCTION

Rotterdam is well known as a connected hub city for the Netherlands and Europe with one of the largest ports in the world. Heavily bombed in World War 2, post war reconstruction allowed the city to develop a strong industrial heritage. Now city officials are reinventing the city as a creative industry hub, attracting technology, business services and a well-educated workforce. Success will rely on continued reorientation of the city’s housing, infrastructure and commercial space provision, as well as public space improvements and development of the city’s architectural clout. Leveraging the economic synergy of the Randstad conurbation (including Rotterdam, Amsterdam, the Hague and Utrecht) whilst competing within Randstad to attract businesses and employees is also a critical success factor.

The Municipality’s Spatial Development Strategy 2030 (Stadsvisie 2030) issued in 2007 outlines the strategy to transition to a knowledge and services economy whilst guaranteeing an appealing residential and social climate capable of attracting more graduates and creative workers.

City Indicator	Data
Arcadis Sustainable Cities Index	5th
Profit	
GDP £	62.01bn ¹
Year-on-year economic growth	1.4% ²
Unemployment rate (%)	9.1% ³
Class A office vacancy rate (%)	18.9% ²
People	
Population (2015)	620,500 ⁴
% of green space	6.6%
Total no. of tourists	900,000 ²
Year-on-year tourist growth	12.6% ²
Purchase price for residential growth (€)	184,900
Planet	
Green electricity consumed as a % of total energy consumption	5.6% ⁵
Greenhouse gas emissions per capita (metric tons of CO2 equivalent)	10.1

ECONOMIC AND POLITICAL OVERVIEW

Rotterdam has seen greater GDP growth than other parts of the Netherlands, including Amsterdam (1.4% compared to 1.3% respectively). The port drives the economy, providing €15.5bn of added value to the Dutch economy in 2012⁶. The port is seen as one of the world’s smartest and most sustainable ports⁷. Investment in digitalisation of logistics, use of robotics and sensors as well as new materials to build more sustainable quay walls or better ships is part of the city drive to maintain port advantage in the global logistics market.

Project	Completion	Description
First Tower	2015	Approximately 40,000 sq.m. of office space in the Rotterdam Central District (RCD)
Marconitoren (II + III)	2020	60,000 sq.m. multifunctional towers in the Stadhavens innovation district. Previously let to the Municipality, now one tower leased by the Rotterdam Science Tower and the other being renovated as part of regeneration in the area.
Boston & Seattle	2017	Two 23-floor residential towers on the shore of the Rijnhaven will provide 220 apartments.
Philadelphia - Havana	2019-2020	2 apartment blocks in Kop van Zuid with approximately 225 and 100 apartments. A cooperation between BPD and Synchroon
Chicago	n/a	Hotel, retail and cultural facilities, feasibility study starts in 2015
Lloydkwartie	2017-2019	Two blocks of apartments and houses, 45 and 5 respectively. Developer selection in 2015
Parkstad	n/a	300 single family homes and 300 apartments, for rent and owner-occupation. Middle and high income market housing.

Table 1 Ongoing and future developments

Despite economic growth the employment rate lags behind other cities in the Netherlands, at 12.3%⁸. A large share of workers are less educated and traditionally work in the logistics and industrial sector, where the number of jobs continues to decline. Disposable income is €27,800 a year, 15.2% lower than the national average but the Municipality's strategy is succeeding in attracting more University educated workers (increasing from 26% of the workforce in 2002 to 38% in 2013) which should begin to drive incomes up as the city transforms.

Its history as a port city has fostered an entrepreneurial attitude of getting things done, and the municipality are leveraging this characteristic into significant investment in start-ups and innovation to support the city's transition to a creative industry hub. The Port Authority and the Municipality created the Stadhavens innovation district with more flexible regulations, in which progressive organisations are clustered and align themselves with start-ups, business incubators and accelerators. One example is Ampelmann, a start-up setting new standards in safety in accessing offshore structures from a moving vessel.

POLITICS

There are three levels of government in the Netherlands: national, provincial and municipal. Provincial governments focus on environmental management, spatial planning and recreation, while municipal government focuses on local level social issues. The city is largely funded by national government, with local taxes only providing a small amount of municipal budgets. Though the municipal council is elected by the population of the municipality, the mayor is selected by the national government and the strategy for the city is ultimately driven by the national agenda.

CONSTRUCTION SECTOR

The construction market in the Netherlands is mostly made up of SMEs, and the contracting market is dominated by a small number of major groups, eg Royal BAM Group who are building the Erasmus

hospital. In Rotterdam, the most active contractor is Dura Vermeer, a typical Rotterdam 5th generation family company.

The Dutch industry experienced a significant decline in output during the recession to 30% below the 2007 peak in 2013⁹. There are now tentative signs of a return to growth with annual increases in output of 4% forecast for 2015-18. Profitability was damaged during the recession due to the contracting community continuing a race to the bottom on prices. Reduction in contractor capacity in the Netherlands over the past 7 years is a challenge to Rotterdam's ambitious construction plans, in particular for residential construction.

Prime real estate assets in Amsterdam, the number one investor destination, are scarce, and investors have been shifting focus to prime properties in other major cities including Rotterdam. Rotterdam has a substantial investment market with €250-350m invested annually 2009-2013 (around 10% of the Netherlands total). 2014 hit record levels of investment, at €1bn driven by sales of iconic buildings such as the Maastoren and World Trade Center in the final quarter of 2014. Investment is centred around the prime locations, with two thirds of investment registered in the central business district and Kop van Zuid over the past 18 months¹⁰.

SUSTAINABILITY

As a low lying delta city, Rotterdam will face challenges with rising sea levels or low river levels and due to its many port activities, Rotterdam is one of the world's major producers of CO2 emissions. These challenges have driven Rotterdam to invest significantly in making both the port and the city sustainable and resilient. The city has committed to halving CO2 emissions from the 1990 base, and to become 100% 'climate proof' (i.e. resilient) by 2025.

The focus for the Municipality's 2015-2018 Rotterdam Sustainability Programme is a green, healthy and resilient city, cleaner energy at lower costs and a strong and innovative economy. It continues on the past 4 years' successful €26.5m programme, which generated a total of €400m sustainable investments in port and city¹¹.

Table 2 Gross prime yields 2015 compared to Amsterdam

City	Office	Retail	Industrial	Residential
Rotterdam	5.8%	3.5%	5.8%	4.3%
Amsterdam	4.9%	3.4%	5.9%	4.0%

Given the simultaneous needs to become climate proof and sustainable in addition to the revamping of the city, climate adaptation and spatial development are inextricably linked in Rotterdam. This is seen in the Zomerhofkwartier Rotterdam, a laboratory for a climate change resilient district where much needed regeneration and sustainability investments are going hand in hand, such as the Benthemplein water square which serves as a public space and a reservoir during flooding.

Table 3 Sustainability and resilience initiatives

Project	Description	Year
Benthemplein water square	Innovative public plaza and recreation area will also act as a reservoir during heavy storms or floods	2014
Heat sharing	Sharing residual heat from petrochemical industry in the port to heat surrounding buildings.	2014
Green rooftops	220,000 sq.m. now achieved	2015
Plastic roads	Agreed to be trial city for recycled plastics roads, which should last up to 3 times longer.	TBC
Eendraftspolder rowing course	Water storage facility (4m cubic meters), recreation area and top sports facility	2013
Tidal park	Park in a tidal river: lush greenery making more attractive, new resting spots and cleaner water for fish and gradually sloping bank adds resilience.	2015
LNG in port	Liquefied natural gas releases fewer hazardous substances than diesel, promoting its use in the port with LNG break bulk terminal	Mid-2016

This combined approach is working; the Rockefeller foundation declared Rotterdam the most sustainable city in the world in 2015 and Arcadis ranked Rotterdam amongst the top 5 sustainable cities, praise well deserved due to the innovative and experimental attitude Rotterdam takes to sustainability.

INFRASTRUCTURE

As part of the highly populated Randstad conurbation, Rotterdam's residents and visitors are highly reliant on the modern and dense transport infrastructure. The well integrated transport system is characterized by different modes, ranging from cycling to trams, trains and water taxis as well as the Rotterdam metro. Cycling remains a preferred mode of transport. Rotterdam The Hague Airport is the second Dutch airport after Schipol, and both airports are well connected to the city centre by public transport.



The Port Vision 2030 lays out the Port Authority's aims to be Europe's most important port and industry complex, leading in efficiency and sustainability. This aim is being implemented through the port expansion Maasvlakte 2, where around 2,000 ha² of land has been reclaimed from the sea and the newest, largest container ships will be able to unload.

The city's infrastructure is undergoing updating: Rotterdam's Central Station was upgraded to serve international High Speed Rail traffic, and won the Dutch BNA Award for Best Building of the Year in 2015. A €1.5bn, 47km expansion of the A15 motorway will be complete at the end of the year, and aims to handle the anticipated increase in traffic due to the construction of APM Terminals' Maasvlakte II facility. Rotterdam is also investing in its social infrastructure, with 'Campus under Construction II', the second phase of the expansion of Erasmus University Rotterdam adding lecture rooms, study spaces and facilities through construction and refurbishment and the €1bn new Erasmus MC hospital to be completed in 2017.

RESIDENTIAL

Steep price increases in Amsterdam make housing increasingly unaffordable and provide an opportunity for secondary cities such as Rotterdam. Rotterdam is actively targeting the creation of 56,000 more units by 2030, targeted to high and middle income populations in the city centre and port areas. At the same time, social housing, particularly in the South of Rotterdam, will be demolished or refurbished.

The average transaction price in Q2 2015 had increased 6.4% from the trough of the market in 2013, less than in Amsterdam (13.9%), but substantially greater than the Dutch average of 3.9%. In fact, current average price level of €184,900 is only 1.2% lower than peak levels, whereas average price remains 7.2% below in Amsterdam, and 10.8% in the Netherlands as a whole, showing a faster recovery in Rotterdam¹³. Most housing in Rotterdam is rented: 47% of people live in social rented units, with only 18% non-regulated rental units and the remaining 35% owner occupied¹³. In the private rental market the average rent reached €13.3 per sq.m. per month: rents have grown across the Randstad over the past year, but have grown most in Rotterdam at 9.4%¹³.



Table 4 Sales price and rent comparison mid 2015

	Rotterdam	Amsterdam	The Netherlands
Average sales price	184,900	290,000	220,000
Average non-regulated rent (€ per sq.m. per month)	13.3	20.7	12.7

COMMERCIAL

The Rotterdam office market is the third largest in the Netherlands after Amsterdam and the Hague. It recovered well in the first half of 2015 after a period of slowdown due to the global crisis. Rotterdam city saw take up levels of around 67,900 sq.m.¹³, the highest six monthly volume seen over the past three years. The substantial take up and limited expansion of supply allowed vacancy levels to drop significantly in H1 2015, mainly in the city centre and Prins Alexander regions. Availability peaked at the beginning of 2014 and currently stands at 18.9%¹⁴.

There is a limited supply of prime office buildings, and many of the outdated office buildings are being transformed into residential, student housing, or hotel properties. Over the past 3 years 200,000 sq.m. of office space has been transformed, with another 220,000 to be completed by 2018¹⁴.

Table 5 Prime rental price and availability rates

	City Centre	Prins Alexander	High	Low
Prime rental levels (€ per sq m per year)	220	125	220	110
Availability rates per district	23%	23%	31%	17%

Lessees are mainly interested in office buildings located in the city centre, especially in the area surrounding the newly refurbished Central Station. The Prins Alexander area has seen the major part of the take up, driven by the Police Service Centre.

Despite improved market conditions, rents were still

under downward pressure in the first half of 2015, in part due to companies demanding better value for money. Prime rents remained quite stable, currently at €200-210 per sq.m. per year, with a few ultra-prime buildings like Maastoren and De Rotterdam in Kop van Zuid reaching €225 per sq.m. per year¹⁴.

RETAIL AND HOTELS

Rotterdam is a booming city for leisure, with the New York Times and Rough Guides declaring Rotterdam one of the top 10 cities to visit in the world, in part due to its cultural and architectural attractions.

The Municipal government successfully lobbied to be the 'European City of Culture' in 2001, and has made it a policy to invest in culture as its industrial employment base shrinks. This resulted in a steep increase in the number of tourists, with an 18% increase in overnight stays and a record 900,000 tourists visiting the city in 2014, a 12.6% increase year on year. The number of hotel rooms has increased to around 4,500 rooms (from 3,100 in 2004), of which 39% are upscale. Average occupancy is around 65% and the average room rate is €100 a night, between that of nearby cities The Hague (€106) and Utrecht (€98)¹⁴.

Rotterdam has the second largest retail stock in the Netherlands, with around 4,000 retail units. The majority of the stock is in the city centre in high streets such as the Lijnbaan. Some international brands are entering the market, several big name retailers are opening shops and in recent years Kruiskade has further developed into a luxury shopping street. Outside of the centre, traditional shopping malls are facing increasing vacancy rates due to an increase in e-commerce.

Markthal, a new landmark for Rotterdam over 13,000 sq.m. and consisting of 100 market booths, 4,600 sq.m. of retail space and a 240 unit arch shaped apartment block over it all attracted 5m people within the first 7 months of opening¹⁴.



Table 6 Prime Retail Rents and Prime Retail Yields in High Street shops September 2015 city comparison¹⁸

	Rotterdam	Amsterdam	Utrecht	The Hague
Prime retail rents (€ per sq.m. per year)	1,650	2,900	1,600	1,250
Prime retail rents growth (5 yr CAGR)	-1.7%	4.7%	1.3%	-2.9%
Prime Retail Yields (%)	4.75	4.10	4.75	5.00

INDUSTRIAL AND LOGISTICS

The total industrial area on offer in Rotterdam increased by approximately 3%¹⁶ in the first half of 2015 and though the number of lease and sale transactions remained stable the industrial property market is definitely picking up.

In comparison to other municipalities with a sizeable industrial property market in the Netherlands, Rotterdam has a very low structural vacancy level, especially when considering long term structural vacancy. Less than 1% of total industrial space on offer has been unoccupied for more than 5 years in Rotterdam¹⁶, indicating a strong enough demand to support the new industrial space coming on stream with the Maasvlakte 2 expansion of the port. However unlike other municipalities, rents continued to drop.

As the most important port in Europe, Rotterdam is attractive to the international logistics market, and companies are investing here, such as EDC for Canon with 100,000 sq.m. completed in 2015¹⁷.

Table 7 Prime Industrial rents and yields September 2015

	Rotterdam	Amsterdam	Schipol	Eindhoven
Prime industrial rents (€ per sq.m. per year)	60	60	88	60
Prime industrial rents growth (5 yr CAGR)	0	0	0.7%	0
Prime industrial yields (%)	6.75	6.80	6.75	6.80

OUTLOOK

Rotterdam is a city in the midst of a government driven transition from its roots as a traditional, industrial port city to a sustainable, climate-proof modern metropolis. Moves to attract higher income households and innovative water, climate and energy businesses are ongoing and will continue to manifest in housing, office and public space projects.

These investments in the city's attractiveness are beginning to pay off, with house prices and rents rising as skilled people with higher disposable incomes start to choose Rotterdam over Amsterdam. The city will continue to focus its attention on updating outdated office space, as well as investing in hotels and retail as the tourism boom continues.

Leading the way in innovative and experimental investment in sustainability and resilience, Rotterdam will continue to set an example for other delta cities to follow, and will provide inspiration to cities globally to tackle their own sustainability and resilience challenges.

REFERENCES

- [Lloyd's City Risk Index 2015-2025](#)
- [Rotterdam Special, Savills \(September 2015\)](#)
- Rotterdam City Review, Euromonitor International (2015)
- [Residential Market in the Netherlands, Cushman & Wakefield \(2015\)](#)
- [Sharp increase in the share of Dutch renewable energy, The Dutch Daily News \(2015\)](#)
- Cities as Engines of Sustainable Competitiveness, European Institute for Comparative Urban Research (2014)
- [Rotterdam Innovation District, Stadshaven Rotterdam \(2015\)](#)
- [Rotterdam Special, Savills \(September 2015\)](#)
- [Market Spotlight – the Netherlands, Construct UK \(2013\)](#)
- [Rotterdam Special, Savills \(September 2015\)](#)
- [Rotterdam Programme on Sustainability and Climate Change 2015-2018, Gemeente Rotterdam](#)
- [Rotterdam, the Netherlands, Europe Real Estate \(2015\)](#)
- [Rotterdam Special, Savills \(September 2015\)](#)
- [Rotterdam Special, Savills \(September 2015\)](#)
- [Rotterdam Special, Savills \(September 2015\)](#)
- [The Dutch Industrial Property Market, NVM Business \(2015\)](#)
- [Rotterdam, the Netherlands, Europe Real Estate \(2015\)](#)
- European Marketbeat Snapshots (Sector Bundles), Cushman and Wakefield (September 2015)