

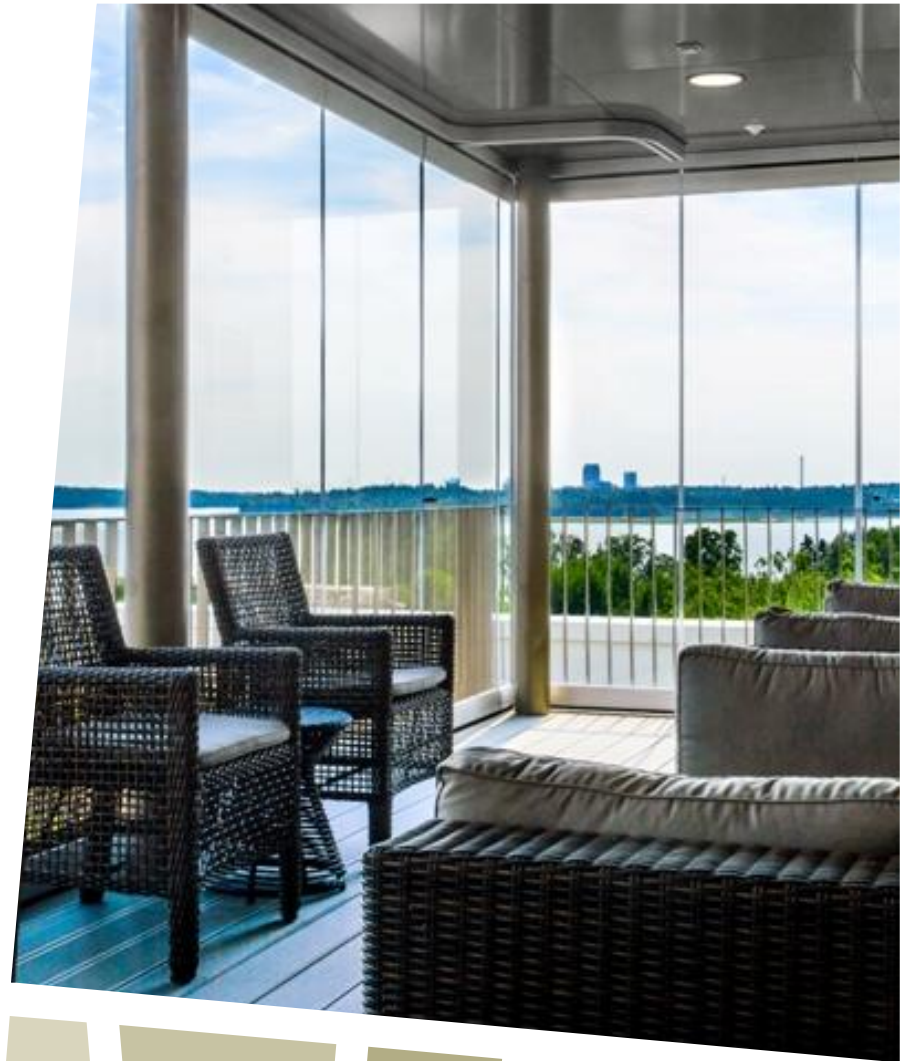
# Derby Business Park

New energy efficient office  
property with  
ideal price-to-quality ratio

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# Location in Espoo- near all the services

- Favorable location in a fast developing Leppävaara business area
- Close vicinity to Turku highway (Turunväylä) and Ring Road I (Kehä I)
- Excellent connections to every direction in Metropolitan Area, 20 min to the Airport and Helsinki CBD
- Finland's second largest shopping center Sello within 1,5 km distance



# Derby – Highlights

- Excellent location within popular office area
- Office GLA 17.400 sq.m, GBA 24.730 sq.m
- Three 7-storey office buildings and a parking house of 567 parking rights
- Long-term lease agreements (3-10 years)
- Anchor tenants Siemens, SRV, Santa Monica Networks, Oxford Instruments
- Long-lasting low-energy solutions, LEED Platinum Certification





# Parking and public transportation

- Parking house of 567 parking rights
- City of Espoo provides about 80 parking places across the street
- Bus stop 400 m, buses from Helsinki and Leppävaara
- Train station in Leppävaara
- Good bicycle roads from Helsinki and around Espoo

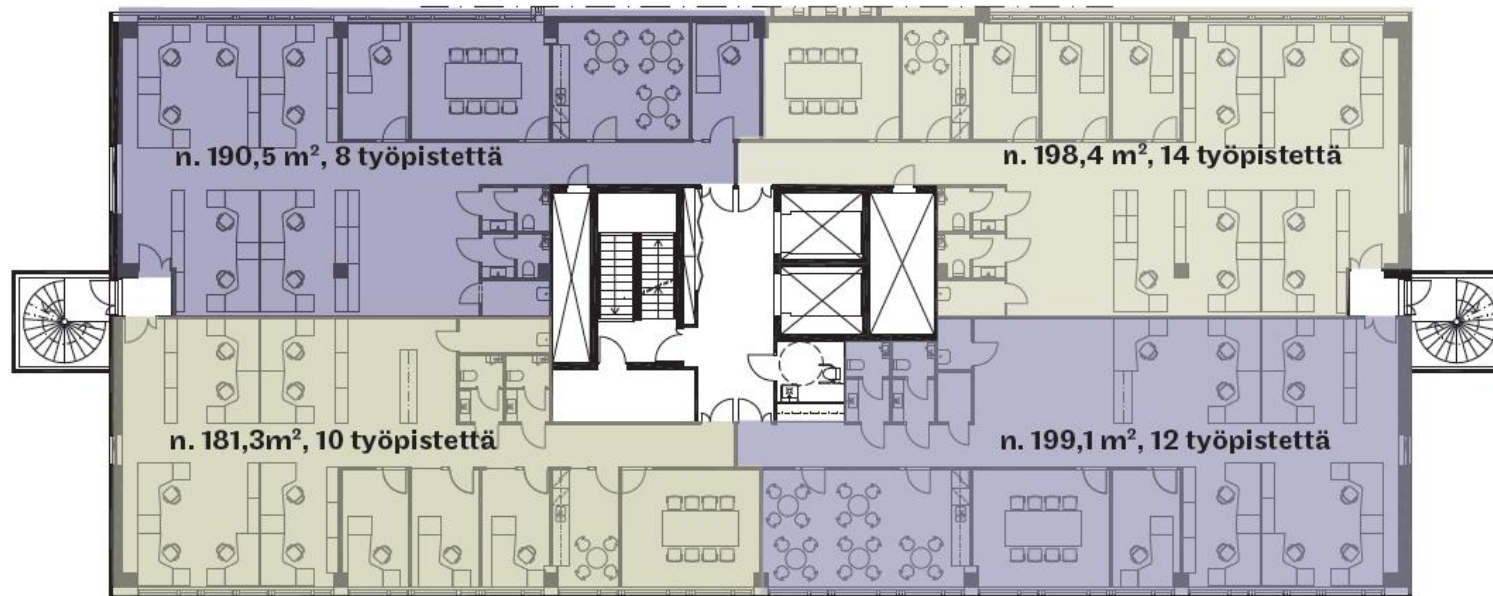


# Business Park Services

- Central reception
- Restaurant and cafeteria
- Rentable meeting rooms
- Catering services
- Penthouse sauna with VIP meeting rooms
- Car wash
- Gym



# Office facilities 770 sq.m/floor

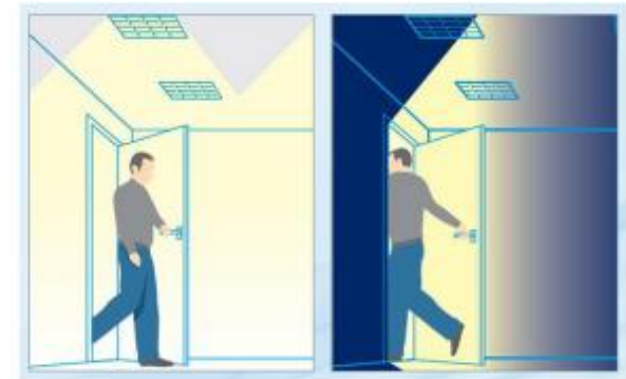


# Key solutions

- Whole Building Energy Simulation (IDA, Riuska)
  - Energy simulations including daylight needed in very early stage to compare massing alternatives
- Holistic design; All designer and expertise involved the project at the beginning
- Compact massing (window to wall ratio)
  - Energy efficient building fabric (U-values)
    - › Walls 0,14 W/m<sup>2</sup> ,K (SPU insulation)
    - › Roof 0,09 W/m<sup>2</sup> ,K
    - › Floor 0,16 W/m<sup>2</sup> ,K
    - › Windows 0,8 W/m<sup>2</sup> ,K
    - › Air leakage rate at 50 Pa < 1,0 ach (air changes per hour)

# Key solutions

- Optimized Energy Performance
  - On-site Renewable Energy
    - › Ground source heat pump (GSHP) for a central heating and cooling (free cooling from 24 boreholes)
    - › Solar Panels (PV-panels) on the roof (36 MWh/a)
- Building automation
  - Metering and controlling systems for energy management
- Pumps and Fans
  - Inverter driven variable speed pumps and fans
- Water
  - Water use reduction; Electronic and hands free faucets





# Key solutions

- Energy efficient ventilation
  - Large mechanical room on the top floor and low pressure ductwork
    - › Reserving enough space for mechanical rooms and risers – 1-2 step larger AHUs and ducts
  - Specific fan power (SFP) of main AHUs 1,8 – 1,9 kW/(m<sup>3</sup>,s)
  - Heat recovery temperature ratio (wheels) 78...80%
  - Heat recovery from toilets – no separate exhausts
  - Good indoor air quality and access to daylight and views
  - Low-temperature heating radiation panels for heating (high-temperature



# Leed Platinum Certification for Shell &Core

- Equipped with high-end technical systems
- Generate energy savings in lighting, heating, electricity and water consumption
- Ground heat is used for heating and cooling
- Green power is used in the whole property
- Water use reduction 20%
- Storage and collection of recyclables
- Good indoor air quality
- Daylight and LED fixtures are used in the lighting of office premises
- Green roofs 500 sq.m
- Electric car parking and charging
- Bicycle storage and changing rooms



# Leed - Energy

- It is the highest energy score of any building in the history of LEED
  - USGBC: “If the project in Finland earns all energy 37 and 5 more energy related exemplary performance and regional priority credits giving a total of 42 energy credits – will this be the highest ever scoring LEED building with regard to energy credits!”

Category	Total	Design Stage	Construction Stage	Renewable energy credits
Energy Credits	37	29	4	4*
Innovation Credits	4	1	1	2**
Regional Priority Credits	3	2	1	
Total	44	32	6	6

\* Renewable energy credits

\*\* Green power 70% (agreement)



# LEED Platinum

- Derby
  - Awarded 84 of 110 points
  - Energy 37 of 37



## LEED Certification Review Report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by the Green Building Certification Institute (GBCI®).

### Derby Business Park

Project ID 1000010805  
 Rating system & version LEED-CS v2009  
 Project registration date 11/02/2010



Certified (Platinum)

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

### LEED FOR CORE & SHELL DEVELOPMENT (V2009)

ATTEMPTED: 84, DENIED: 0, PENDING: 0, AWARDED: 84 OF 110 POINTS

Category	Points Available	Points Earned
<b>SUSTAINABLE SITES</b>	18 OF 26	18
SSc1. Construction Activity Pollution Prevention	1	1
SSc1. Site Selection	0/1	0/1
SSc2. Development Density and Community Connectivity	0/5	0/5
SSc3. Brownfield Redevelopment	0/1	0/1
SSc4.1 Alternative Transportation-Public Transportation Access	6/6	6/6
SSc4.2 Alternative Transportation-Bicycle Storage and Changing Rooms	2/2	2/2
SSc4.3 Alternative Transportation-Low-Emitting and Fuel-Efficient Vehicles	3/3	3/3
SSc4.4 Alternative Transportation-Parking Capacity	0/2	0/2
SSc5.1 Site Development-Protect or Restore Habitat	0/1	0/1
SSc5.2 Site Development-Maximize Open Space	1/1	1/1
SSc6.1 Stormwater Design-Quantity Control	1/1	1/1
SSc6.2 Stormwater Design-Quality Control	1/1	1/1
SSc7.1 Heat Island Effect-Non-Roof	1/1	1/1
SSc7.2 Heat Island Effect-Roof	1/1	1/1
SSc8. Light Pollution Reduction	1/1	1/1
SSc9. Tenant Design and Construction Guidelines	1/1	1/1
<b>WATER EFFICIENCY</b>	4 OF 10	4
WEp1. Water Use Reduction-20% Reduction	1	1
WEc1. Water Efficient Landscaping	4/4	4/4
WEc2. Innovative Wastewater Technologies	0/2	0/2
WEc3. Water Use Reduction	0/4	0/4
<b>ENERGY AND ENVIRONMENT</b>	37 OF 37	37
EAp1. Fundamental Commissioning of the Building Energy Systems	1	1
EAp2. Minimum Energy Performance	1	1
EAp3. Fundamental Refrigerant Mgmt	1	1
EAc1. Optimize Energy Performance	21/21	21/21
EAc2. On-Site Renewable Energy	4/4	4/4
EAc3. Enhanced Commissioning	2/2	2/2
EAc4. Enhanced Refrigerant Mgmt	2/2	2/2
EAc5.1 Measurement and Verification-Base Building	3/3	3/3
EAc5.2 Measurement and Verification-Tenant Submetering	3/3	3/3
EAc6. Green Power	2/2	2/2
<b>MATERIALS AND RESOURCES</b>	4 OF 13	4
MRp1. Storage and Collection of Recyclables	1	1
MRc1. Building Reuse-Maintain Existing Walls, Floors and Roof	0/5	0/5
MRc2. Construction Waste Mgmt	2/2	2/2
<b>MATERIALS AND RESOURCES</b>	CONTINUED	
MRc3. Materials Reuse, DN	0/1	0/1
MRc4. Recycled Content	0/2	0/2
MRc5. Regional Materials	2/2	2/2
MRc6. Certified Wood	0/1	0/1
<b>INDOOR ENVIRONMENTAL QUALITY</b>	21 OF 32	21
EQp1. Minimum IAQ Performance	1	1
EQp2. Environmental Tobacco Smoke (ETS) Control	1	1
EQc1. Outdoor Air Delivery Monitoring	1/1	1/1
EQc2. Increased Ventilation	1/1	1/1
EQc3. Construction IAQ Mgmt Plan-During Construction	1/1	1/1
EQc4.1 Low-Emitting Materials-Adhesives and Sealants	1/1	1/1
EQc4.2 Low-Emitting Materials-Paints and Coatings	1/1	1/1
EQc4.3 Low-Emitting Materials-Flooring Systems	1/1	1/1
EQc4.4 Low-Emitting Materials-Composite Wood and Appliance Products	1/1	1/1
EQc5. Indoor Chemical and Pollutant Source Control	1/1	1/1
EQc6. Controlability of Systems-Thermal Comfort	0/1	0/1
EQc7. Thermal Comfort-Design	1/1	1/1
EQc8.1 Daylight and Views-Daylight	1/1	1/1
EQc8.2 Daylight and Views-Views	1/1	1/1
<b>INNOVATION IN DESIGN</b>	6 OF 6	6
Idc1.1 Innovation in Design	1/1	1/1
Idc1.2 Innovation in Design	1/1	1/1
Idc1.3 Innovation in Design	1/1	1/1
Idc1.4 Innovation in Design	1/1	1/1
Idc1.5 Innovation in Design	1/1	1/1
Idc2. LEED® Accredited Professional	1/1	1/1
<b>REGIONAL PRIORITY CREDITS</b>	4 OF 4	4
RPc1. Water Efficient Landscaping	1/1	1/1
RPc2. Innovative Wastewater Technologies	0/1	0/1
RPc3. Water Use Reduction	0/1	0/1
RPc4. Optimize Energy Performance	1/1	1/1
RPc5. Enhanced Commissioning	1/1	1/1
RPc6.2 Measurement and Verification-Tenant Submetering	1/1	1/1
<b>TOTAL</b>	<b>84 OF 110</b>	



# Steps of implementation

- Reservation of the plot was made in October 2007, landscape permit and building permit was given December 2010
- Time between 1.4.-15.8.2011 was protected for birds to make their homes
- Building started in the beginning on year 2011
- First building A and the parking house were ready in Augusti 2012.
- Siemens headquarters and the house B were finished by July 2013
- Sold to Niam equity real estate firm October 2014

# Tenants

- Office space is 100 % leased out
- Tenants are:
  - Siemens HQ
  - SRV
  - Fazer Food Services
  - Oxford Instruments Analytical
  - Santa Monica Networks
  - Also
  - Nepton
  - Suomen Tilaajavastuu
  - Goodmill Systems
  - Colgate Palmolive
- Spellpoint
- Datawell
- HR4 Group
- All together about 1000 people working in Derby

Thank you!

