

# Eco-towns: Learning from International Experience Case Study Matrix

Project	Adamstown, Dublin	Kronsberg, Hanover	HafenCity, Hamburg	Hammarby Sjöstad, Stockholm	Freiberg a: Vauban b: Rieselfeld	Amersfoort a: Vathorst b: Nieuwland c: Kattenbroek
Country	Ireland	Germany	Germany	Sweden	Germany	The Netherlands
Urban extension or new town?	Urban Extension	Urban Extension	Inner City Regeneration	Inner City Regeneration	Urban Extensions	Urban Extensions
Area of development	214h	100h (Phase 1 & 2)	155h total, water 55h, land 100h, 60% Net building to land to infrastructure	200h	a: 38h b: 70h (on part of a 320h sewage farm)	a: 550h b: approximately 209h c: approximately 159h
Area of open space	30h	19% public access space	5.8h parks, 3h private open space, 11h promenades and squares	Private space: 25m <sup>2</sup> within 500m of flat, increasing to 50m <sup>2</sup> for less dense areas.	Vauban children's zoo, public square, play areas and green communal space between blocks Rieselfeld country park, public square, play areas, an 'experience nature' path and green communal spaces with large SUD ponds	a: New canals b: New canals and Lake c: New canals, sports fields, communal recreation space with play area and outdoor theatre
Area of open space as a %	14% the majority in four parks	5 - 10% extra	20% of land area	Typical phase, 56%	Unknown	Unknown
Number of dwellings	By April 2008 permission has been granted for 2,165 residential units within the Adamstown SDZ lands under seven separate planning permissions. A total of 10,000 is envisaged by 2016	Phase 1 - 3,000 built to date, growing to 6,000	5,500 dwellings on 600,000m <sup>2</sup> of gross floor area	11,000	a: 2,000 b: 4,200	a: 11,000 (over 3,000 built) b: 5,420 (completed) c: 5,547 (completed)
Number of residents	25 - 30,000 when complete in 2016	6,300 in the first two phases, growing to 15,000	10,000 - 12,000	25,000	a: 5,000 b: 10 - 12,000	a: 30,000 b: 14,750 c: 11,589
Number of jobs	2,500 jobs	3,000 in the vicinity	20,000 initially, but latest estimate is between 45,000 - 50,000 on 1.8 to 2.0 million m <sup>2</sup> of gross floor area	Approx 10,000	a: 600 b: 1,000	a: approximately 5,000
Owner occupation	8,750 or 87.5%	300 dwellings	Yes	Varies, between 50-70%	Unknown	Varies 53-70%
Rented, other than social landlord	Unknown	Remainder rented	Yes	Varies, between 50-30%	Unknown	Varies 20-47%
Social housing	1,250, or 12.5%	Council first nominations to 900 dwellings	None. Affordable through cooperatives	None. Affordable through cooperatives (often City owned)	a: Approximately 45hu (housing units) - Students' Organisation and the SUSI initiative (Self-organised Independent Settlement Initiative). Approximately 36hu - Housing Association b: Data unavailable	Varies 30-45%
Area of mixed use	125,500 m <sup>2</sup> of non residential development, 40 shops, multiplex cinema, offices, bars, restaurants, library health centre etc	Small mixed use to meet the needs of the immediate residents	Mixed use neighbourhoods. Single use buildings adjacent others with different uses. Many mixed use buildings	Shopping on GF along main streets and some waterfront	b: Central public square with library featuring a media centre for young people, leisure centre, schools, mixed faith church and fire station. Mixed use shops/houses for trade and services along the Rieselfeld alley	a: 17,500 - 20,000 m <sup>2</sup> main shopping centre, 2,500 m <sup>2</sup> local shopping centre, two health centres, one library, one theatre and between 5-10 restaurants and cafes c: 17,500 m <sup>2</sup> local shopping centre
Housing density range	Three density ranges, 35 - 54 d/h, 50 - 78d/h and 75 - 90d/h	Density varied. Max floor space index was 1.2 at the 4/5 storey blocks	2.5 Average floor space index	145dph. No houses	40 - 50dph gross	a: 36dph average (different neighbourhoods between 27 - 48 dph) b: 31 dph c: 31 dph
Date of initial design study	Rezoning discussions started in 1998	1990 City approved proposals to proceed	May 1997 Mayor presents vision to public	Started in 1991	a: 1992 b: unknown	a: 1996 - 1997 First conceived in 1994 as part of the Government's VINEX programme, Vathorst Development Company formed in 1998. b: unknown c: unknown
Date of submission for planning	Incremental	1995 start of development planning	Dec 1997 decision made to develop.	1997 (masterplan)	a: 1993 b: unknown	a: unknown b: 1993 (planning began) c: 1986 (planning began)
Date of planning approval	Rezoned for housing in 1998, Local Area Plan approved 2001, Planning Approval in 2003, first detailed permission in 2004 Sept 2003	City zoning plan approved 1994	Masterplan drafted 1998.	1997 (masterplan)	Unknown	a: 2001 b: unknown c: unknown
Date of start on site	Nov 2004	Shortly after 1995	2002	1993 infrastructure, 1999 dwellings	a: construction began by the mid-1990s b: 1993	a: 2002 b: 1995 c: 1990
Date of first handovers	Feb 2006 (Houses)	By 2000, 3,000 dwellings were complete	End of 2007 800 people.	First phase 2001 - 2003	a: 2001- 2000 people started to move in b: By 2007 over 7,650 residents had moved in	a: Over 3,000 homes have been completed b: unknown c: unknown
Current progress	1,000 dwellings complete plus four shops	Half complete with shops and community facilities	25 year ongoing, on programme	Over half way, will complete in 2015	a: Completed 2006 b: Due for completion by 2010	a: Completion 2014 b: Completed c: Completed
Who was the champion?	Private developers	Public Authority	City of Hamburg	City of Stockholm	City of Freiburg	Part of central government's VINEX programme led by the municipality with a Joint Venture Company for Vathorst
Who owned the land? Private developer, Public Authority, Community, other	Private developers	60% public authority four other major owners	90% owned by the City	Largely owned by the City of Stockholm	Acquired by municipality from government (Vauban) and from sewage works (Rieselfeld)	Vathorst - land originally owned by farmers and sold off to developers and the municipality
Principle funder of infrastructure, Public Authority, private, mixed	Joint Venture company of three developers and concessions	From planning gain, but some public subsidy	Bank loan funded out of land sales	Local Authority and Central Government	Bank loan funded out of land sale.	Public bank
How popular is the housing?	Housing has been selling well	Very few vacancies	All new housing occupied	Very	Few resales and many cooperatives	a: Appealing to a wide market though sales are slowing down b: Not as popular c: Very popular (45% social)
Were the following available shortly after completion of the first phasing of houses;	Three Primary schools complete, (two complete) and one Secondary school	Three Kindergartens, Primary school, Playhouse	After the first phase was complete	Yes. Have had to build more schools to meet unanticipated number of children	Relocation of a Secondary school formed heart of Rieselfeld Primary school at Vauban designed for reuse as offices	a: Crèches, day nurseries and schools were available. Enlarged Secondary school at Vathorst to cope with unexpected demand
Schools						
Green spaces	Three large parks, one 12h, two of 4h each plus pocket parks	Yes	Works concurrent with first handovers	Yes	Large communal spaces with play areas	Yes, network of green spaces plus waterways
Transport connections to jobs	Railways station and good road and bus connections to city centre	Yes, trams, metro and trains	Works concurrent with first handovers	Yes. Trams, free ferry and new ring road	Tram extensions forming spine of both	a: Rail station opened after first few thousand residents at Vathorst. Access to the A1 motorway (access to the A28 opens in 2008). Bus, foot and cycle routes to Amersfoort city centre
Community centres	A multi-denominational place of worship, a series of community buildings across the development and civic building in the centre	Sports hall, 15 community rooms	Works concurrent with first handovers	Yes, but more considered necessary	Cultural and sports centres at Rieselfeld	a: Health care centre and the Vathorst Information Centre, a dedicated facility for residents and visitors with a café a model of the development
Shopping	Yes, district centre granted planning July 2008	Yes, at edge of site	Works concurrent with first handovers	Small shops, no large supermarkets which are however easily accessible	Yes, in district centre	a: Temporary shops and bank at first, while the main shopping area in being built
Construction costs	Full costs not published. - District centre €1.2 billion - Rail station €6.2 million	€2.2 billion (also see text)	€6.8 billion (also see text)	£1.5 billion	a: Estimated investment €500 million	Unknown
Energy targets	Standard Building Regulations requirements	Low Energy Housing (LEH) standard set 1995. 50 kWh/m <sup>2</sup> heating (a little better than current UK 2006 bldg. Passivhaus - Energy use 15kWh/m <sup>2</sup> /yr regs.)	High standards set in later phases: A standard called kfw 60 -Haus is now a mandatory level. (60 kWh/m <sup>2</sup> for space heating and hot water - equivalent to UK code level 3*)	Yes, as well as targets for water and waste (set 1990 50% improvement over 1990 levels)	Yes, known as the solar capital of Europe with 12% from renewables	10% improvement on Government's VINEX targets for energy consumption.(0.7 EPN rate has been achieved in Vathorst [Energy Performance Norm])
Infrastructure	Strategic roads, some completed, others under construction. Pumping station, construction commenced. Health centre and fire station	Trams, rail and metro connections completed early on, if only to meet the needs of Expo 2000	Two new underground stations. Existing road links to Hamburg and two underground stations at North edge	Roads and ferry access in place before housing complete, tram line finished with first phase	Leader in reducing car dependency. Tram and bus systems and main line train	a: Rail links to the centre of Amersfoort and the rest of The Netherlands including, to Amsterdam and Utrecht. Cycle routes, two motorway connections and half hour bus service