

Facts and Figures, Clusters in Schleswig-Holstein (SH) and Hamburg (HH)

Cluster Microtechnology

Subject	Comments	Facts and Figures
Cluster focus		Micro-, Nanotechnology
Type of network	Network, cluster, competence centre	Competence centre (Itzehoe)
Cluster type (I)	Technological, innovative, tertiary	Technologically and innovative
Cluster type (II)	Industry, technology, value added chain	Value added chain with focus on micro-technologies
Cluster type (III)	Established, growing, emerging, as vision	Competence centre is established, creation of a cluster emerging
Common ground		Microtechnologies (knowledge-based cross-section technologies, not identifiable in the system of traditional industries)
Technologies		Micro-, nanotechnology, power electronics, silicon technology, micro-sensor technology, surface physics and chemistry, semiconductor physics, food technology
Specialization		Technical input for various industries: medical, environmental, traffic engineering, IT, machinery and vehicle construction, electrical engineering (electric motors and pumps)
Sciences		Electrical engineering, materials science, surface physics, semiconductor physics
Adjoining clusters		Life Science (via Nano-Biotechnology), Food cluster (food quality control)
Cluster-Management		Innovation Centre Itzehoe (IZET, founded 1993), Society for Technology Promotion, Itzehoe
Main cluster agents for a complete cluster	Key enterprises	Vishay Siliconix (Itzehoe)
	Qualification institutions	University of Kiel (Technical Faculty) Polytechnics Kiel and West Coast Technical University Hamburg-Harburg Business Academy Elmshorn and Itzehoe
	R&D (University)	University of Kiel, Technical Faculty (with Nano-Lab, Centre for Nanotechnology in SH), cooperation of the ISIT-management with the University of Kiel Polytechnic Kiel (Competence Centre "Functional Surfaces")
	R&D (Institutions)	Fraunhofer Institute for Silicon Technology ISIT, with 150 employees in Itzehoe, expansion planned. (Relocation from Berlin in the early 1990s) Competence Centre for power electronics (part of ISIT) Centre for Applied Nanotechnology (CAN, Hamburg)
	Business and financial services	HSH Nordbank (Kiel, Hamburg)
	Supporting institutions	Innovation Centre Itzehoe (IZET) Hightech Itzehoe e.V. (location marketing) Business Association Unterelbe-Westküste WTSH (Business Development and Technology Transfer Corporation Schleswig-Holstein) Innovationsstiftung SH, Chamber of Commerce SH, Investitionsbank SH
	Complementary industries	Condias, Sollith Batteries, eBiochip (in IZET Itzehoe), partly outsourced from IZET
Qualified labour		Small labour market in Itzehoe. Recourse to the large Hamburg labour market necessary.
Network Building		Tight local network, in particular close cooperation IZET – Vishay, spatial expansion of the network planned

Cluster size	Employees and firms	Location Itzehoe (2005): 650 employees, 56 firms
Regional focus		Spatial concentration on location of Itzehoe (Steinburg), spatial expansion planned. Relation to nanotechnology Hamburg via network NINA (see below), in Hamburg in particular: nano-biotechnology (part of the Hamburg Life Science cluster)
Regional significance		Given for Itzehoe (city) and the region of SH Südwest (resp. the northwestern urban fringe of Hamburg)
Regional identification		Visible for Itzehoe
Innovation		High innovation potential
Competitive situation, perspectives		Many competitive clusters, inter alia in Saxony. Cluster Itzehoe has to find a niche position and seek for complementary relationships with other clusters
External relations		North German Network in Nanotechnology: NINA (North German Initiative Nanomaterials), connection to nanotechnology in Hamburg Nanotechnology Research: connection between the University of Kiel (Technical Faculty) and the Syddansk Universitet (Sønderborg) ("NanoSyd")
Sources	Reports, Expertises, Internet-Information	Sources (see list): 2, 3, 14.