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SHiFT

*Support Systems for Sustainable
Entrepreneurship and Transformation*

***Good practice collection
University support for sustainable
entrepreneurship***

***Hamburg University
of Technology (TUHH)
Germany***

TUHH
Technische Universität Hamburg-Harburg

Good practice collection

SHIFT (“Support Systems for Sustainable Entrepreneurship and Transformation”) is a unique research project and is funded through the EU programme ECO-INNOVERA: www.eco-innova.eu. SHIFT’s main goal is to enable universities, incubators, business development organizations, financial institutions and other relevant actors to support eco-innovation and sustainable entrepreneurship more effectively. On the basis of thorough empirical analysis of the status quo and the identification of good practices world-wide, concrete and realistic recommendations have been developed for policy makers and actors of the support systems: www.shift-project.eu

The Hamburg University of Technology (TUHH) is part of a selection of good practice profiles the Borderstep Institute has collated in the context of the SHIFT project to highlight exemplary activities of higher education institutions (HEIs) in Finland, Germany, Sweden, the United Kingdom and the USA that have successfully integrated sustainability in their entrepreneurship support systems.

Hamburg University of Technology (TUHH) – Germany

Characterization: *Technical entrepreneurial university with a focus on green technologies*



Good practice highlights

TUHH bundles their research activities in the three competency areas (Green Technologies, Life Science Technologies and Aviation & Maritime Systems). **The competency area of “Green Technologies”** encompasses three fields of research, namely Renewable Energies, Systems-Storage-Networks and Water and Environmental Engineering.

TUHH Startup Dock: collaboration between the Institute of Entrepreneurship and the Centre for Innovation & Entrepreneurship. It supports TUHH students and alumni interested in setting up their own enterprise. Entrepreneurs with a focus on “Green Technologies” are advised by a start-up consultant “Green Technologies”.

TUHH and Northern Institute of Technology Management (NIT) offer a unique double-degree programme (M.Sc. from TUHH and **Master or MBA in Technology Management from NIT**). The programme is inspired by a vision for globally responsible leadership rooted in a wide qualification, comprising intercultural skills, ethics and languages.

Startup Prize “Sustainability”: national award for exceptional founders with a scientific background. It is awarded for exemplary achievements in the development of innovative and technology-orientated business ideas whose implementation results in a more efficient use of resources or reduction of carbon emissions.



Key data

Location: Hamburg-Harburg, Hamburg, Germany

Founded: 1978

Number of students: 7,000

Profile: TUHH is a competitive entrepreneurial university focussed on high-level performance and high quality standards. TUHH is dedicated to the principles of Humboldt (unity of research and education). TUHH has a strong international orientation and also focusses on its local environment. It does so by contributing to the development of the technological and scientific competence of society. Aiming at excellence at the national and international level in its strategic research fields. Educating young engineers and academics within demanding programmes using advanced teaching methods. The TUHH has been honoured by the German Federal Ministry of Economics and Energy (BMWi) as one of the best entrepreneurial universities in Germany (one of the 22 winner for the EXIST program line „Culture of Entrepreneurship” in 2013).

Interview with Dr. Ralf Grote

Head of the President's Office
Hamburg University of Technology (TUHH)



Why did your university/business school start to support sustainable entrepreneurship and/or eco-innovation endeavours?

Research topics such as "Cleaner production", "Substitution of chemical constituents by biological systems", "Renewable resources" and "Recycling of waste and residues", etc. have a long tradition at TUHH. The current president of TUHH, Professor Garabed Antranikian, has his background in this particular area of research. His focus as a researcher is on interdisciplinary collaboration with engineers to establish processes for the eco-friendly production of fine chemicals, pharmaceutical agents and fuels refined from biomass. In 2004 he received the German Environmental Prize from the President of the Federal Republic of Germany donated by the German Federal Environmental Foundation ("DBU – Deutsche Bundesstiftung Umwelt"). Consequently, "Green Technologies" have long been part of our DNA.

Who initiated your programmes, what were the milestones of their evolution?

With his commencement as the university's president in April 2011, Professor Garabed Antranikian, based on the needs of our society, defined a clear vision and concrete guidelines for the duration of his 6-year presidency. These include the focus of research activities on global socio-technical challenges, positioning the TUHH as an entrepreneurial university and the gradual expansion of the TUHH to a sustainable university. This

focus triggered a process of integrating research activities in three competency areas: "Green Technologies", "Life Science Technologies and Aviation & Maritime Systems". At the same time the issues of sustainability and entrepreneurship were kept in mind as strategic goals. The long tradition of knowledge transfer with the help of TuTech GmbH should be supplemented by the support of knowledge-based start-ups in the defined competency areas. The university's distinction as an entrepreneurial university and its qualification for the EXIST Programme "Entrepreneurial Culture" in 2013 supported the development of necessary structures. For this purpose, the Startup Dock was established in 2013 and organized in accordance with the three competency areas (including a specialized advisor for „Green Technologies“). The start-up award "Sustainability" can be highlighted as one of the first sustainability-specific start-up support activities. In 2014 a professorship in entrepreneurship was created and filled by Professor Christoph Ihl, offering a unique selection of entrepreneurship courses for students of all fields.

What can other universities learn from it?

TUHH can only serve as a role model if we verbalize our activities and make these transparent so that other universities are able to identify relevant components for themselves. Hereby, an individualized approach is very important! Unique selling points ought to be recognized. TUHH does not look at specific areas in isolation but at their interconnections. This creates

synergies and also credibility. In order to recruit the best minds we need to explore new paths. An openness to applicants outside of traditional academic career paths is helpful.

What are your next steps/future plans?

Next is the evaluation of the second stage of the EXIST Programme „Entrepreneurial culture“. We will further develop the Entrepreneurship chair. An "Innovation Campus Green Technologies" is planned to combine basic research with real-life applications in the competency area of "Green Technologies". The campus will strive to be a hub for R&D, technology transfer and collaborations with industry. Moreover, we would like to generate good practice examples and success stories in order to strengthen the entire sustainability domain.

What has been the impact of your sustainable entrepreneurship support?

More than 40% of all projects which are supported by the three start-up consultants have a background in "Green Technologies". This is one reason why the TUHH Startup Dock offers a specialized support for business ideas focusing on "Green Technologies". Now that TUHH's Startup Dock is expanding its support to all universities in Hamburg, even more green start-ups are expected to be formed, not least due to Hamburg's supportive environment for "Green Technologies".



Additional Information

Hamburg University of Technology:
<http://www.tuhh.de/alt/tuhh/startpage.html>

Startup Dock:
<http://www.tuhh.de/startupdock/home.html>

Northern Institute of Technology Management:
<http://www.nithh.de>

TuTech Innovation GmbH:
<http://tutech.net>

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www.borderstep.org

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