



WBCInno

*– Ways of knowledge and technology
transfer at Graz University of Technology –*

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Ways of KTT + type

	Ways of KTT	Technology push / Market pull
1	contract & collaborative research projects	(mostly) pull
	industrial joint ventures incl. infrastructure (3-10 yrs.)	push & pull
2	patenting / licenses	push
3	spin-outs (<i>university as shareholder</i>)	(mostly) push
	start-ups (<i>eg via academic incubator</i>)	(mostly) pull
4	student projects / placement & career services	(mostly) pull
5	training courses / e-learning	push & pull
6	scientific conferences, publishing	push



KTT + TU Graz income



WBCInno

	Ways of KTT	income p.a.
1	contract & collaborative research projects	>>10 Mio. €
	industrial joint ventures incl. infrastructure (3-10 yrs.)	>>1 Mio. €
2	patenting / licenses	>>100.000 €
3	spin-outs (<i>university as shareholder</i>)	<100.000 €
	start-ups (<i>eg via academic incubator</i>)	(directly) 0 €
4	student projects / placement & career services	>>100.000 €
5	training courses / e-learning	>>100.000 €
6	scientific conferences, publishing	>100.000 €

appr. 1.000 partners in collaborative / contract R&D projects





R&T House services for facilitating / accompanying science-business projects:

- analyzing businesses' requests for innovation projects → expert matching with scientists (or signposting to other institutions) → organizing meetings / workshops
- project funding opportunities, assistance for applications
- (for TU staff): assistance in contractual matters (eg IPR)
- (for TU staff): administrative project management
- (for TU staff): monitoring financial claims in IPR issues





Other R&T House services for science-business projects:

- involvement in negotiating large-volume partnership contracts
- training of TU Graz staff in public funding instruments
- involvement in assisting start-ups (with academic incubator Science Park Graz)





Framework conditions for **science-business R&D projects**:

- Austrian University Act (1975): departments may operate „third-party-projects“ with industry/businesses
- Austrian University Act 2002: „Vollrechtsfähigkeit“: centralized administration of third party funds





In Austria: good public funding opportunities for science-business R&D projects: subsidies for small bilateral projects but also for large integrated projects.

Key agency: FFG Research Promotion Agency (500 Mio.€)

- *Innovation Voucher for SMEs* (5k€, 100% funding or 12k€, 80% funding)
- *Feasibility Studies for SMEs* (40k€, 75% funding)
- ...
- *COMET Competence Centers for Excellent Technologies*
(> 5 Mio.€ budget, 3-10 yrs., large consortia)





< large textile sun shading systems for buildings >

R&T House: proactive company visit at *TRS Ltd.* (20 employees):
mechanical problems with large sun shading „sails“ (tension, motor) →
meeting with 2 TU Graz institutes → first ever collaborative projects
(2-step feasibility study, cost 21 k€, 16k€E public funding)

prototype has led to new product (60 sq.meter sun shade + motor)

<http://www.youtube.com/watch?v=hISKNOIkSM>

< multifunctional plug&play facade >

R&T House: proactive company visit at *SFL Ltd.* (facade construction,
400 employees): arrangement of meetings with 4 professors and CEO
for sustainable energy facade idea → team building, application

→ 5-year project with 3 R&D partners (1,2 Mio.€ TU Graz) + 11 suppliers,
50% public funding, mutual use of infrastructure, access to young
professionals → SFL may relocate headquarter to Graz





Framework conditions for IPR commercialization:

- Austrian University Act 2002: IPR ownership is with the university, universities are to exploit foreground IPR
 - + EU *Community Framework for State Aid for R&D&I*, 2006
 - + EU *Commission Recommendation on the management of intellectual property in knowledge transfer activities and Code of Practice for universities and other public research organisations*, 2008

Public funding instruments

- aws **uni:invent**: Austrian programme to increase university IPR commercialization (2005-2009)
- aws **PRIZE fund** (until 2009): 50-100 k€ for a prototype development project based on a scientist's invention





IPR services (1)

R&T House services in IPR issues:

- (for TU staff): Assistance in contractual IPR matters
- evaluating employees` inventions (appr. 50 / year), inhouse or external (eg with public agency)
- assisting the drafting of patent application with patent attorneys
- **commercialization of inventions**
 - via sending Technology Offers to companies
 - via external Technology Exploitation companies
 - via transferring right of ownership to existing project partners





IPR services (2)

Other R&T House services in IPR issues :

- training of TU Graz staff in IPR matters
- involvement in IPR Commercialization networks (Austrian partners, LES, ASTP, ...)
- involvement in assisting start-ups (with Science Park Graz)





lessons learned

science-industry projects - what industry people want:

- immediate project start, strict timeline
- to get to know high-qualified young graduates
- to tap expertise of senior researchers and use modern infrastructure (otherwise too expensive)
- no fuss about IPR, if possible 100% exploitation rights

science-industry projects - what academics want:

- challenging tasks
- to draw assessment indicators (eg citations, dept. income)
- to gain some revenue for the institute
- no fuss about IPR, no „legal tricks“ from industry side





- Innovative businesses in the region with challenging R&D needs and good growth perspectives (mobility of researchers / students may be surprisingly low)
- Many graduates in the businesses (informal contacts)
- Understanding for universities` tasks teaching, basic research → understanding for timelines („senior scientifics already have a 100% job to do“)
- Acceptance of academics` need to draw scientific results and publications from projects
- Acceptance of project cost: it is not „taxpayers` money anyway“





- Scientists with leading-edge knowledge in a subject „about to boom“ eg (TU Graz 1990s) data encryption, .html, sustainable process engineering, diesel direct ignition, density meters
- Professors with a former career in the private sector
- Sufficient permanent staff to manage third-party projects
- Good infrastructure (eg for measuring tasks)
- KTT support services
- Acceptance at rectorate`s level that knowlegde and technology transfer (KTT) is not entirely for profit





Thank you for your attention

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