

Experiences from the Austrian COMET Programme

Competence Centres and their Future

TAFTIE Expert Session 1
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HISTORY – COMPETENCE CENTRES IN AUSTRIA



- 1998: Start predecessor programmes
(2006: *Kplus*, *K_ind/net*: 45 centres and networks)
- 2008: Start COMET programme
- 2013 - 2015: Impact analysis
- 2016: Start COMET (next generation)

COMET OVERVIEW (2008 – 2016)



Programme lines (volume/centre)	Funding rate	Funding Vol. (fed/regio 2:1)	Duration	Status
K2 Centres (10-15 Mio. €/a)	40 – 55%	max 7,5 Mio. €/a	5 + 5 yrs (new: 4+4 yrs)	5 K2-Centres ongoing
K1 Centres (4-5 Mio. €/a)	40 – 55%	max 2,55 Mio. €/a	4 + 4 yrs	17 K1-Centres ongoing <ul style="list-style-type: none"> + 1 K1-Centres in phasing out 3 K1-Centres completed
K Projects (appr. 1 Mio. €/a)	35 – 45%	max 0,68 Mio €/a	3 - 4 yrs	16 K-Projects ongoing <ul style="list-style-type: none"> + 8 K-Projects approved 30 K-Projects completed

Total volume COMET approved*

EUR 1.65 bn

Federal funding	EUR	518 m	(31 %)
Provincial funding	EUR	259 m	(16 %)
Contribution of scientific partners	EUR	83 m	(5 %)
Contribution of company partners	EUR	795 m	(48 %)

* Incl. phasing out K1 calls 3 and 4

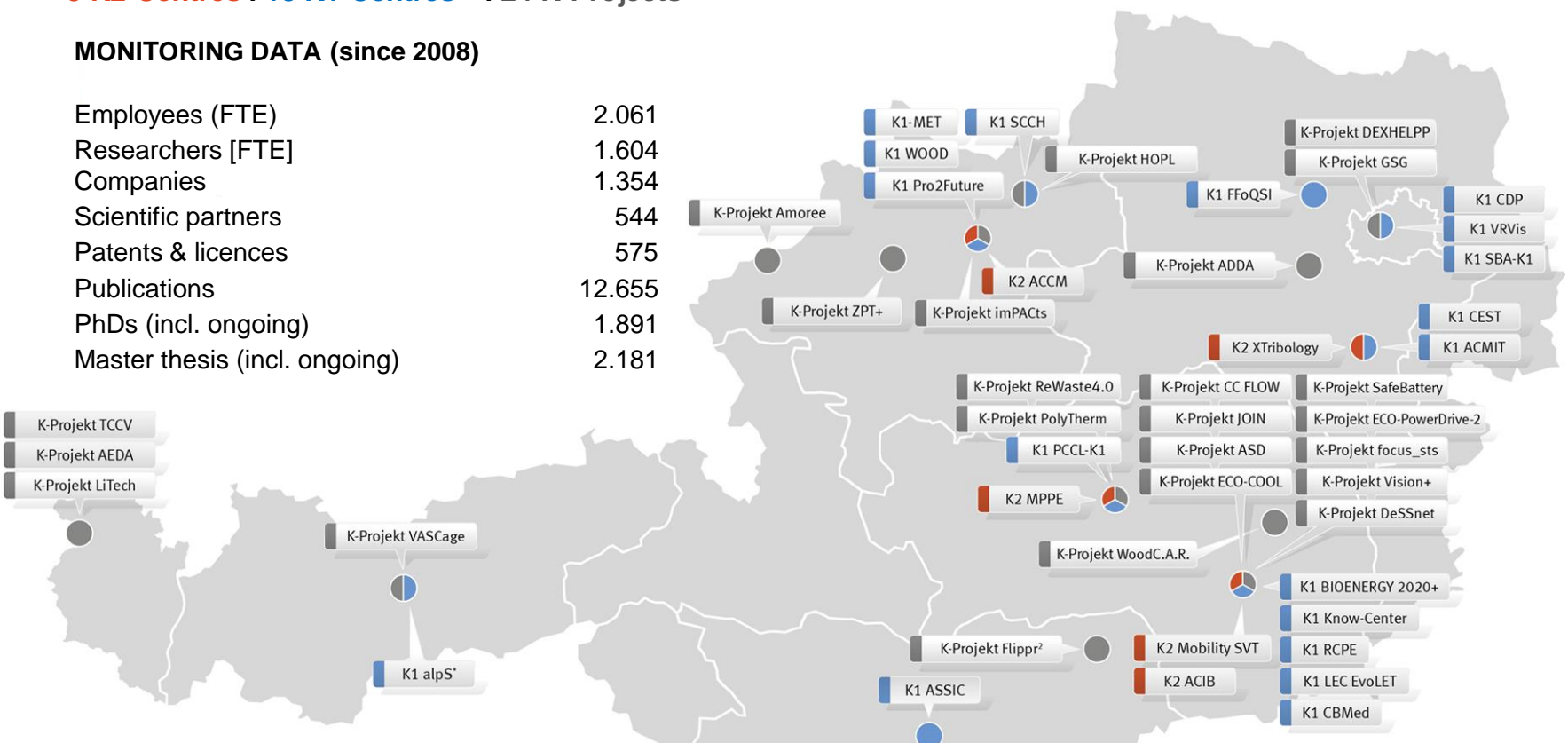
COMPETENCE CENTRES AND K-PROJECTS IN AUSTRIA



5 K2-Centres | 18 K1-Centres** | 24 K-Projects**

MONITORING DATA (since 2008)

Employees (FTE)	2.061
Researchers [FTE]	1.604
Companies	1.354
Scientific partners	544
Patents & licences	575
Publications	12.655
PhDs (incl. ongoing)	1.891
Master thesis (incl. ongoing)	2.181



* Phasing Out

Stand: 16. 11. 2016 Quelle: FFG Förderstatistik
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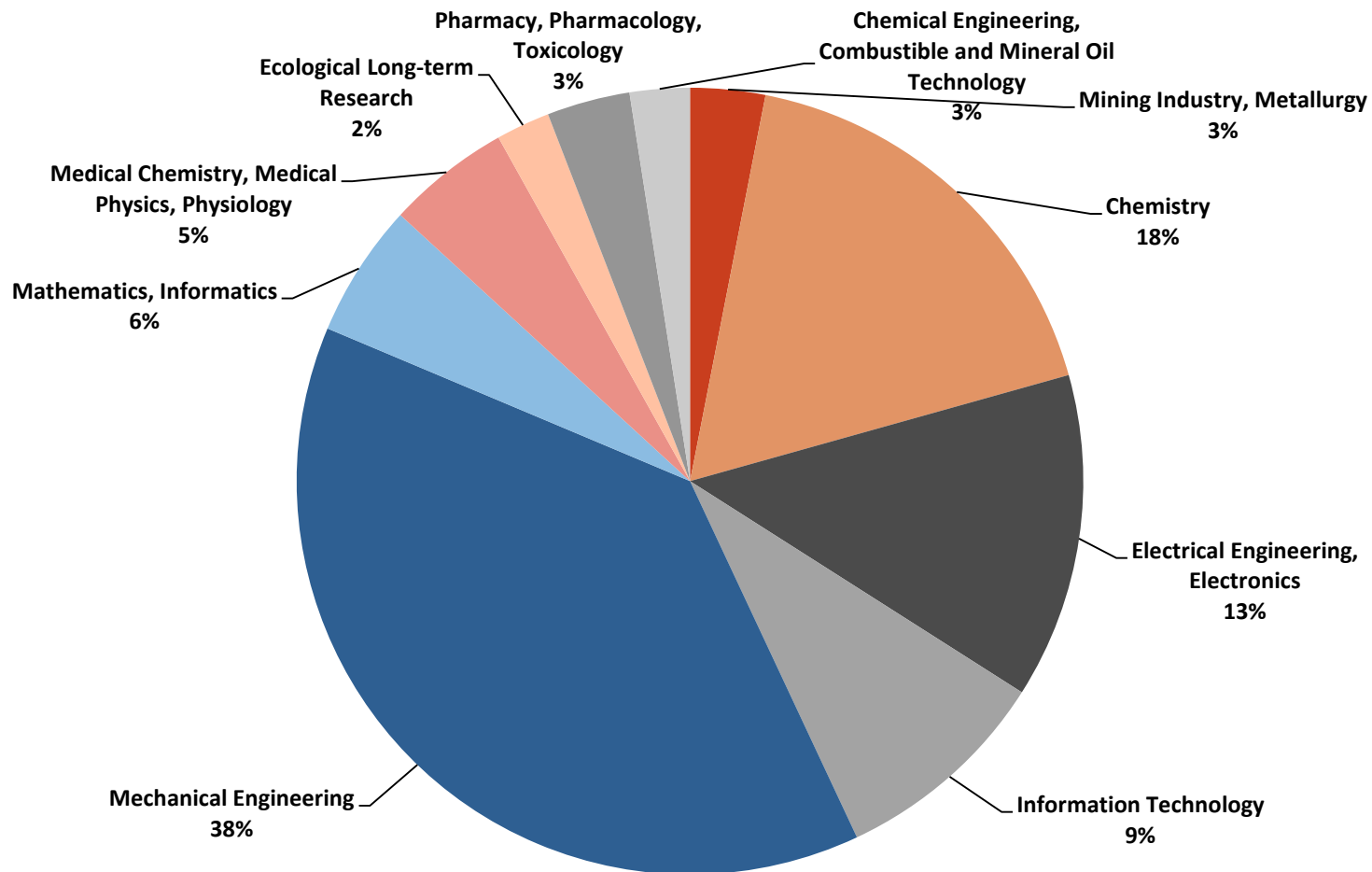
Status monitoring unchanged since 05/2016

BRANCHES OF SCIENCE K1/K2 CENTRES

K2-Centres Call 1-2, K1-Centres Call 1-3



FFG



IMPACT ANALYSIS

New orientation of the programme



Main Results

- Strong orientation towards exploitable R&D
- Attractive for industry → presentable market innovations
- However: decreasing importance of strategic research
→ Danger: Centres could turn into **R&D service providers**; no longer capable to set **new/strategic impulses** in research
- The smaller lines (KP, K1) are more effective in terms of allocation of funding
- High degree of internationalisation is justified for COMET Centres

COMET: PROGRAMME OBJECTIVES



Enhanced objectives

- **Developing and focussing competences** through long-term research cooperation between science and industry at the highest level.
- **Strengthening Austria as a business location:** accelerating technology transfer to industry should create **new products, processes and services**, open up new markets and increase the innovative capacity of companies.
- **Strengthening Austria as a research location:** excellent cooperative research should trigger **new research impulses** and establish **promising fields of research**
- **Strengthen the competitiveness of science and industry** by **driving internationalisation** as a sign of high quality cooperative research: involving internationally-renowned univ.+companies; make COMET Centres internationally attractive partners; ongoing benchmarking with top research institutions
- **Establish and develop human resources** → intensify transfer of know-how
 - increasingly attract scientists of international renown,
 - create structured career models for scientists,
 - actively support inter-sectoral mobility for research personnel

COMET: NEW PROGRAMME LINES



3-line model with COMET Modules as a new programme line

The new 3-line model enables:

- Open up **new research areas** for a COMET K1 Centre via a COMET Module (min. 1 scientific partner, min. 3 company partners)
- Build up competences and human resources in a **physical centre** (min. 1 scientific partner, min. 5 company partners)
- Gain **access** to COMET in a COMET Project as part of a **consortium** (min. 1 scientific p., min. 3 company partners)

Strategic orientation, degree of novelty



COMET Module

Federal funding: max. 0.5 m €/a
Public funding: 80%
Duration: 4 years

COMET Centre (K2, last round)

Federal funding: max. 4 m €/a

COMET Centre (K1)

Federal funding: max. 1.7 m €/a
Public funding: 40 – 55 %
Duration: 8 years

COMET Project

Federal funding: max. 0.45 m €/a
Public funding: 35 – 45 %
Duration: 3 – 4 years

COMET: THE NEW PROGRAMME LINES



K1/K2 Centres become one line: COMET Centres

COMET Projects: (former K-Project)

- Open for **new initiatives** and **topics** (“fresh blood”)
- Applied research in science-industry collaboration
- Development into a COMET Centre is possible, but not necessary

COMET Centre: (former K1/K2 Centres)

- In the medium-term only one centre line (K1)
- Developing of new and focussing of existing competences at top international level
- COMET Centres should trigger **new research impulses**

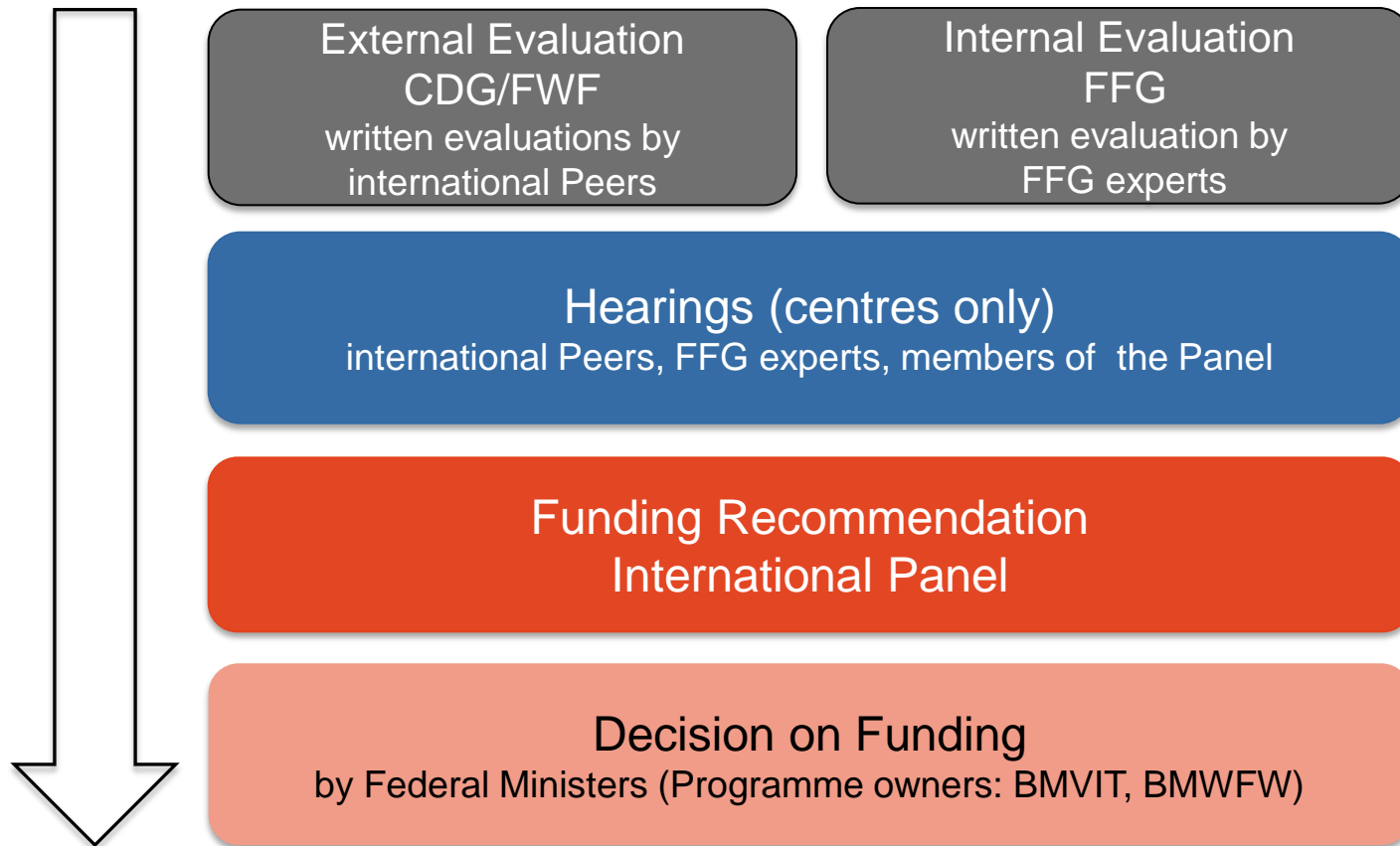
COMET Module: (new)

- establish **new/promising fields** of research (new fields of excellence)
- research with **particularly high-risk** („way beyond state-of-the-art“);
not an aim: incremental research
- Only existing COMET Centres (K1) may apply for COMET Modules in the future



- Creating **flexible opportunities for growth and expansion** for COMET Centres (K1) via the COMET-Modules.
- Guarantee **the possibility for renewal** of the centres by allowing research in promising/emerging fields and the build up of new areas of expertise.
- Ensure the COMET **dedication to excellence** of the centres that makes them **sustainably useful and attractive for industry**.
- **Efficient allocation of funding**, as in average smaller units reach a proportionally higher output (publications, patents, etc.).
- Higher funding quota for COMET-Modules (80% instead of 55%) allows for excellent strategic research in the highest level.

COMET Evaluation Procedure



EVALUATION CRITERIA – NEW



According to new FFG standards

4 Main Criteria

1. Quality of the project
2. Suitability of the applicant / project partners
3. Benefit and exploitation
4. Relevance to the call

Centres: only consortia with a **minimum of 50 points** (of 100) are invited to the hearings

EVALUATION CRITERIA

SUB-CRITERIA



1. Quality of the project

- 1.1. Scientific quality of the Research Programme
- 1.2. Quality of strategic research in promising/emerging fields
- 1.3. Quality of planning

2. Suitability of the applicant / project partners

- 2.1. Quality of the consortium from a scientific perspective
- 2.2. Quality of the consortium in terms of the company partners
- 2.3. Organisation and management

3. Benefit and exploitation

- 3.1. Economic relevance of the research results
- 3.2. Benefit and exploitation at the Centre
- 3.3. Market relevance of strategic research in promising/emerging fields

4. Relevance to the call

- 4.1. Development of human resources
- 4.2. Internationalisation
- 4.3. Incentive effect of funding

COMET: EVALUATION STEPS



According to the COMET evaluation concept

	Ex-ante	Review (COMET-Project & Module)	Mid-term evaluation (centres)	Ex-post evaluation
When	before	Mid-term	year 4	end
What is evaluated?	proposal	targets / progress	targets, results, research plan for 2 nd FP	results
Wo	experts / jury FFG: internal FWF/CDG: external	FFG; if needed external experts	external experts and FFG	FFG; if needed external experts
Consequences	go / no go	recommendation	stop / go	final instalment

Indicators at centre level

- Comparing the target values defined upon submission with the actual values as part of the mid-term evaluations / reviews

Target values at programme level (min. average per year)

- 20% share of strategic research (of eligible total costs)
- 1,150 publications per year
- 500 company partners, 250 scientific partners
- 40 patents and licences per year
- 1,000 FTE researchers employed in COMET
- 200 PhD/a, 200 Masters/a

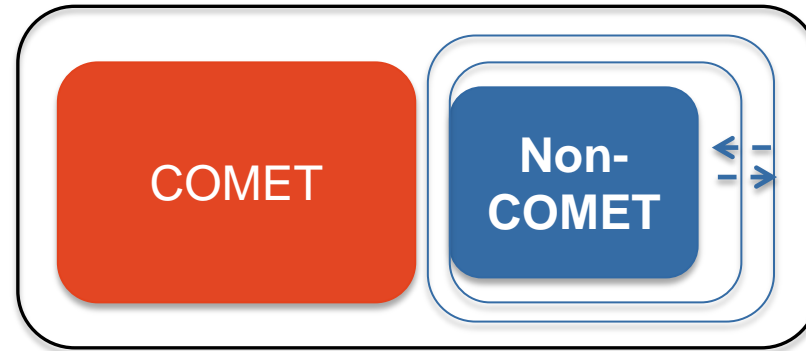


WHAT IS A COMET CENTRE? (1)

- **Own legal entity** (Limited liability company or similar)
- **Concentration of research** at one (or several) site(s)
- **Building-up of competences** directly at the centre
 - Own employees, Qualification measures,
 - Own knowledge base



WHAT IS A COMET CENTRE? (2)



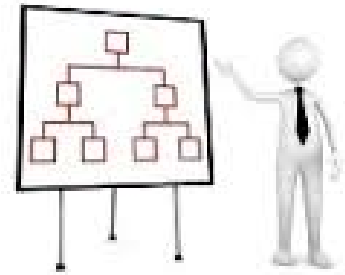
COMET funded area

Non-COMET funded area (= indicator)

- Industry contracts
- Other funded projects
- International/EU funded projects (horizon 2020 etc.)

GOVERNANCE

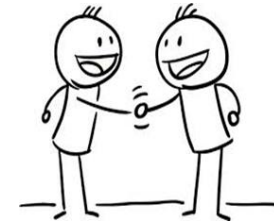
- Well-balanced **ownership** (science - industry)
 - Independent Centre **management**
 - Secure strategic, controlling, advising **tasks** by
 - Legal bodies
 - Centre specific boards
(e.g. Strategy Board, Internat. Scientific Advisory Board)
- ⇒ FFG is invited as observer (non vote)





- **Multifirm criterion**

- min. 1 Scientific Partner
- min. 5 Company Partners



- **Letter of Commitment** (cash / in-Kind)

- **Agreement:** Rights & Duties of Partners

=> FFG provides Agreement guidelines inkl. Best Practice IPR-Side Letter (finalisation before 1. payment!)

- Participation from Partners outside Austria is fine

PHASING OUT: Exit Strategy

- Who:** Existing centres, being negative evaluated, qualify for a Phasing-out period (treshold: > 50 % points)
- Duration:** max. 1 Year (K1); 1,5 Years (K2)
- Funding:** max. 50% of previous av. funding
- Objective:** Finalisation of research work (incl. PhDs ...)

IMPORTANT (LEGAL) DOCUMENTS & INFORMATION



- **Guidelines** for the promotion of industrial and technological research, technology development and innovation (1.1.2015)
<https://www.ffg.at/recht-finanzen/rechtsgrundlagen>
- **COMET programme document: Version 2016 (in English)**
https://www.ffg.at/sites/default/files/allgemeine_downloads/strukturprogramme/programmdokument_comet_2016_en_1.pdf
- **COMET evaluation concept: Version 2016 (in English)**
https://www.ffg.at/sites/default/files/allgemeine_downloads/strukturprogramme/evaluierungskonzept_comet_2016_final_0.pdf
- **Overview of COMET centres / projects**
https://www.ffg.at/sites/default/files/allgemeine_downloads/strukturprogramme/20161129_comet_overview_centresprojects.pdf
- **Fact Sheets for each COMET centres / project**
<https://www.ffg.at/en/comet-competence-centers-excellent-technologies>

THANK YOU



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COMET

<http://www.ffg.at/comet>