



Building a stronger partnership between industry and education

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where chemistry meets life sciences

1. Who is essencia?

2. Why do we need a partnership?

3. Our actions

4. The Innovation Circle & Fund





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Chemistry & Life Sciences in Flanders



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- A major economic player:
 - ✓ Direct employment: 58,600
 - ✓ Indirect employment: 100,000
 - ✓ Turnover: € 42.7 billion
 - ✓ Investments: € 1.8 billion
 - ✓ R&D-expenditures: € 1.4 billion (1/2 of the private sector)
 - ✓ Trade surplus: € 17 billion



- essencia vlaanderen: 466 member companies



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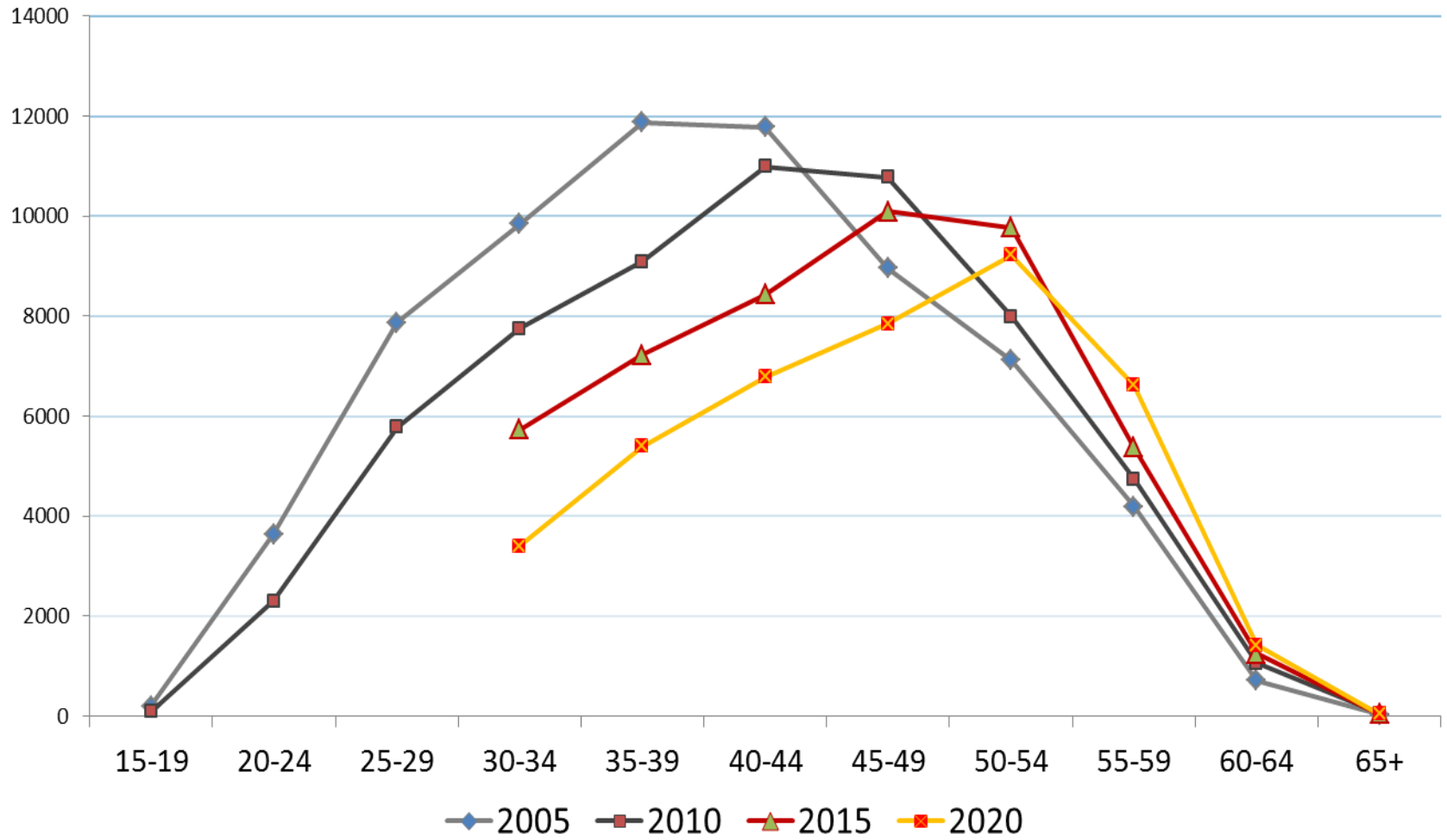
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Employees age evolution: largest age group 50-54 in 2020



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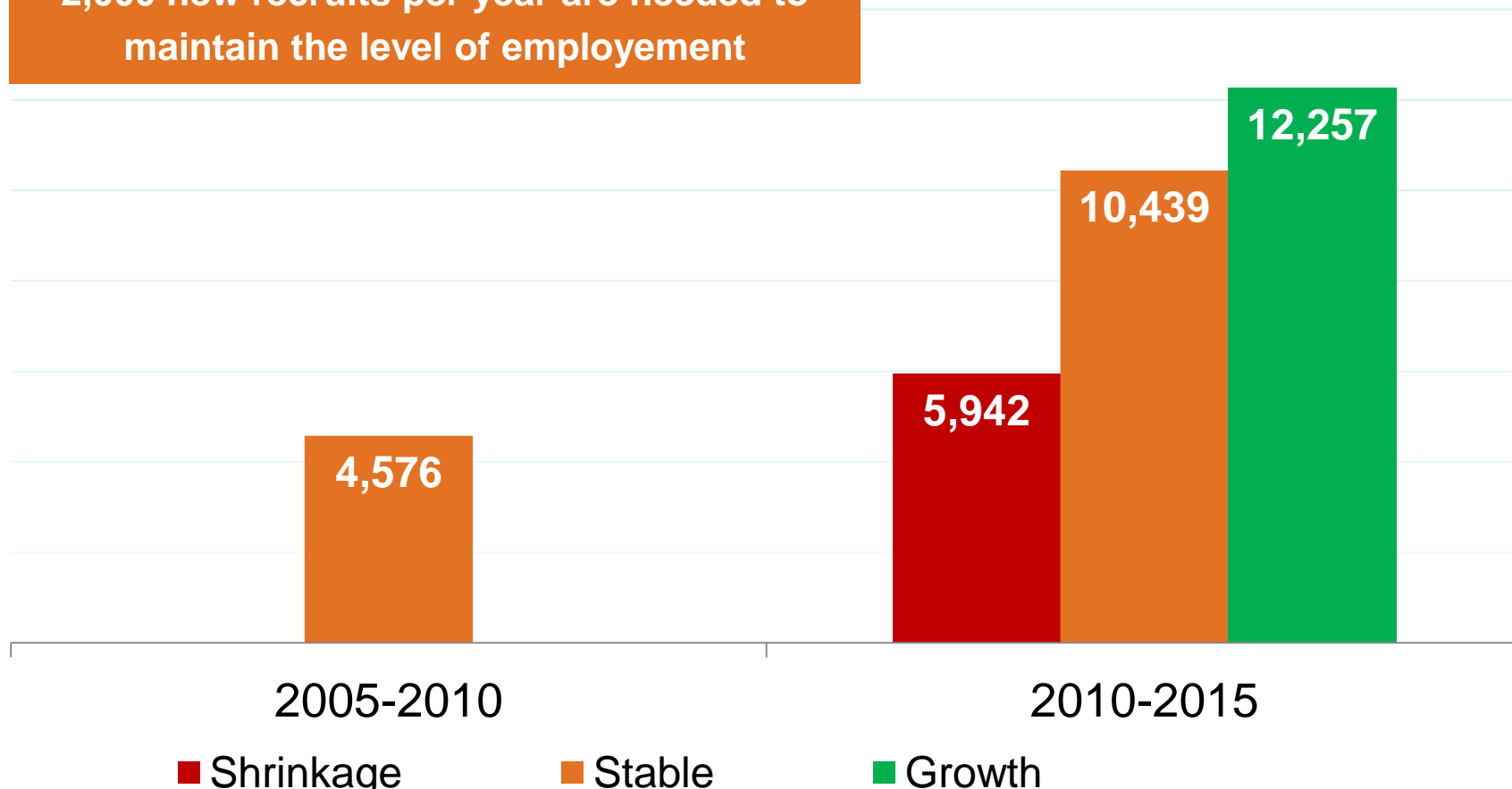


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2,000 jobs/year

2,000 new recruits per year are needed to maintain the level of employment





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Only chemists?

Bottleneck jobs

- Process operators
- Maintenance technicians
- Engineers
- ...

A large spectrum of relevant studies

- Professional bachelors: electromechanics, chemistry, process technology, biotechnology, ...
- Masters: engineering, science studies, ...
- Technical Secondary Education (TSO) and Secondary-after-Secondary studies

=> 80% of the jobs don't require a degree in chemistry



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Support STEM-education

- Building bridges between industry and all levels of education
- Establish an education system that answers the needs of the chemical and life sciences industry
- Build a positive brand for technical and scientific studies





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Primary education

Focus on sensibilisation:

- World Record 'The Biggest Chemistry Lesson'
- Plastic Lab



Secondary education



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Focus on substantive cooperation:

- Covenant/agreement with secondary education: focus on image of chemistry lessons, training sessions for teachers,...
- Usage of sectoral training centres by schools and support of important fields of study



Secondary education



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Focus on sensibilisation:

- Innovation Camps, Meet the Boss, Bringing employers to the class rooms, ...
- Partnership with the Technopolis Science Center



Higher education



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Focus on substantive cooperation:

- Covenant/Agreement with the Flemish High School Council (VLHORA)
- Close collaboration to determine the content of study programs
- essenscia Chair 'Safety Engineering' (KU Leuven)
- 'We Are Chemistry' Jobfair

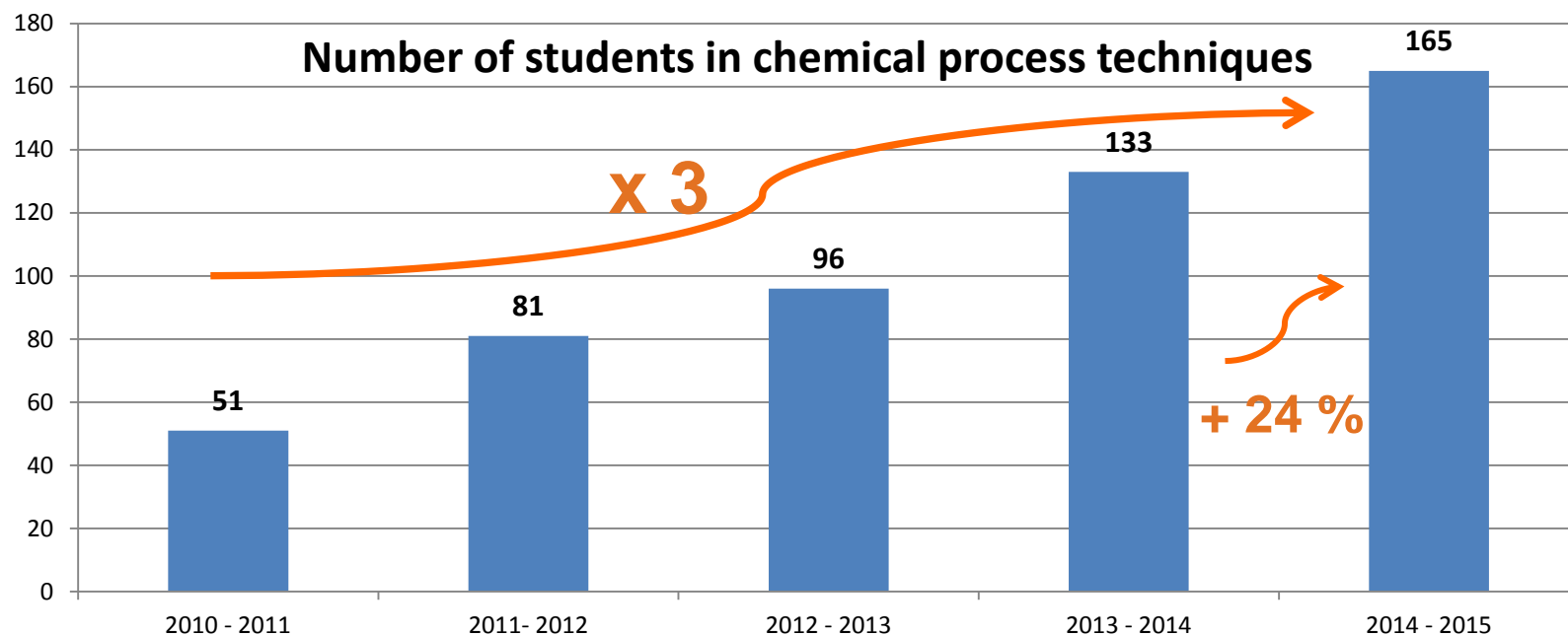




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Any results?



- 2007: “struggle for life”
- 2014: “booming business”



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THE INNOVATION CIRCLE

The Innovation Circle vzw/asbl

CREATED IN 2013, IN ORDER TO PROMOTE AND SUPPORT
INNOVATIVE PROJECTS IN THE CHEMICAL AND LIFE SCIENCES
INDUSTRY IN BELGIUM

- Members: François Cornelis (Chairman), Philippe Bodson, Edouard Croufer, Koen Debackere, Benoit Gailly, Christian Jourquin, Jean Stéphane, Luc Sterckx, Jean-Marie Solvay, Guido Vandervorst, Luc Vansteenkiste, Yves Verschueren
- Support: essenscia (hosting), Deloitte, KUL
- Functioning: 9 meetings per year – mentorship of the selected projects by one Member
- Type of assistance: sounding board, strategic planning, networking, managerial advice, ...
- # projects: 14 opened, 5 closed



THE INNOVATION CIRCLE

The Innovation Fund nv/sa

CREATED IN 2015, IN ORDER TO FINANCE INNOVATIVE PROJECTS IN THE CHEMICAL AND LIFE SCIENCES INDUSTRY IN BELGIUM

- Initial Capital: 13 mio EUR → 20-25 mio EUR on closing (02/2016)
- Investors :
 - The Members of the Innovation Circle, the Solvay Family
 - TOTAL, SOLVAY, BASF, CARMEUSE, SIOEN, RECTICEL, SOUDAL, DOMO, KU Leuven R&D,
 - ING, SFPI/FPIM, S.R.I.W., I.M.B.C., SAMBRINVEST, MEUSINVEST
- 12 years: 6 of investment, 6 of divestment
- Investment scope : material science, process technology, Hygiene and cosmetology, recycling, biosciences
- Management: EEBIC Ventures - Pol-Henry Bonte as dedicated manager

The future?



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Continuing our efforts ...