

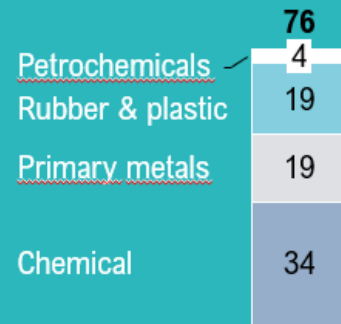
Apprenticeships for a greener labour market

Policy lessons based on the
greenification of an existing
training module in Flanders
(Belgium)

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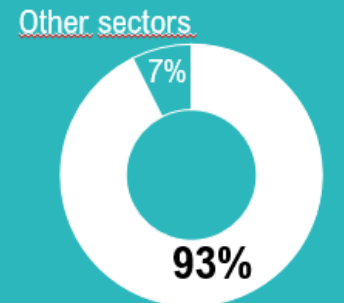


Context: (green) skills forecasting for the energy-intensive industry in Flanders



Base industry in Flanders

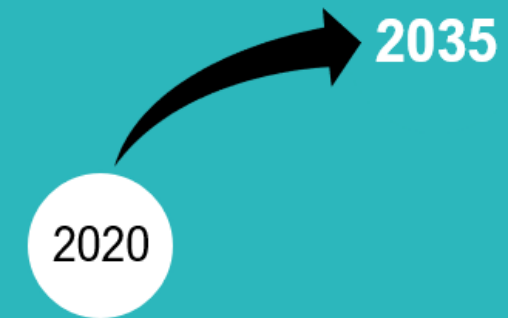
[k workers, Flanders 2019]



Sectors in scope

Highly energy-intensive

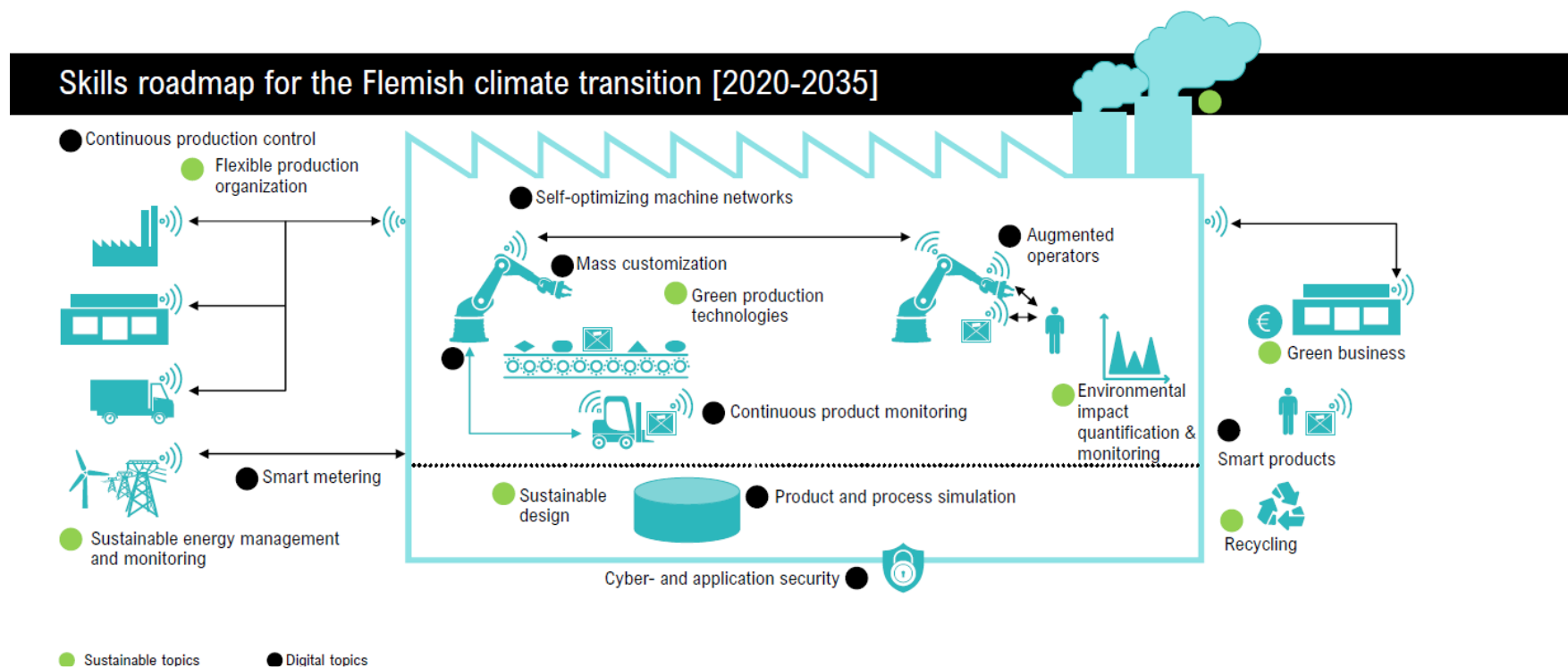
[Share in the industrial emission, Flanders, 2019]



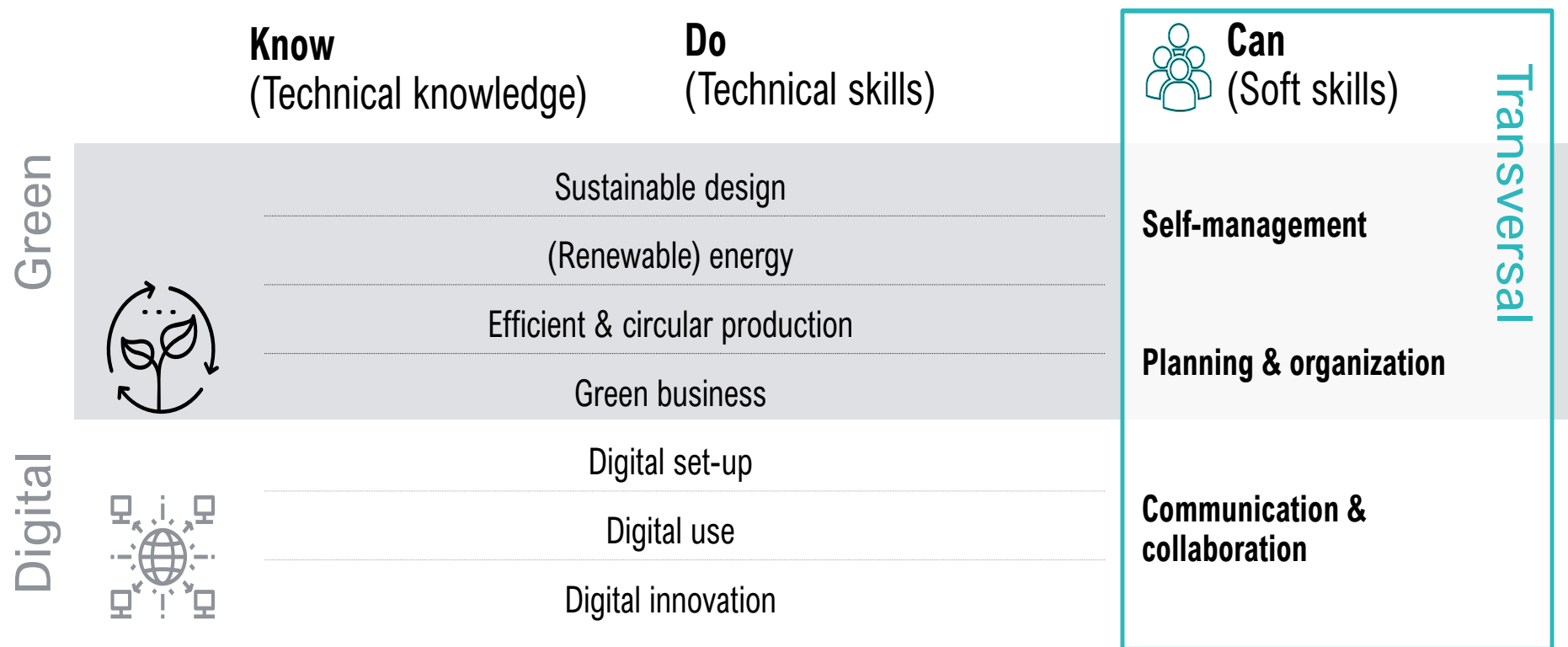
Medium to long term

[Time horizon of the analyses]

Context: in the workplace of the future, the green and digital transition go hand in hand



Context: A new competence framework for the energy-intensive industry



Context: skills challenges for the energy-intensive sectors in Flanders



Apprenticeships as a solution for training students as well as reskilling and upskilling employees

- ▶ To address the skills challenges for the energy-intensive sectors there is a need to increase the upskilling capacity for students, jobseekers and employees in green and digital skills
- ▶ Benefits of apprenticeships:
 - Flexible training method that ensures workers develop the right skills
 - Provides a strong learning environment
 - The productive contribution of apprentices to the employer during their period of apprenticeship.
 - No indirect training cost of unworked paid hours in comparison with training for employees outside the workplace

Case: the greenification of an existing training module in the chemical sector



- Available for students in VET, jobseekers and employees
- Part of an apprenticeship in chemical process techniques

Skills forecasting

Training module on chemical process techniques in a simulated workplace

- Distillation techniques
- Learning how to work with pumps, measuring devices, steam generators



Greentraining module on chemical process techniques in a simulated workplace

- Adding energy management to the distillation training
- Creating awareness on sustainability through a 'green crimes' VR game
- Include sector-orientated sustainability cases in new course material



Interviews with stakeholders involved in the case

- ▶ Period: June-July 2021
- ▶ Respondents (N=9):
 - Head of Co-Valent, a joint (parity) sectoral training fund in the chemistry, plastics and life sciences sector
 - Education and labour market specialist @ Essenscia, Belgian sector federation of the chemical industry and life sciences
 - HR representative, Production manager and 2 process operators @ BASF, a multinational chemical company
 - Consultant @ Regional Technological Center Antwerp (RTC)
 - Chemistry teacher @ VET school
 - Apprenticeships coordinator @ VET school

Main findings



Green skills are a combination of knowledge and skills but also attitude



It is difficult to teach green skills in a school context only



Teachers are not sufficiently trained to teach green skills and are not well aware of the green transition in companies

Main findings



Green skills are included in the curricula and education objectives but there is a lack of coordination and concrete course material



In companies, short-term economic return still takes precedence over ecological thinking



It is often not profitable for private training providers to offer training on green skills only



Adapting an apprenticeships to future green needs requires close collaboration between companies, schools and private

Policy recommendations

Create awareness by
specific green skills
forecasting



Incentivise
(financially) the
integration of green
skills in training and
education



Stimulate
apprenticeships to
teach green skills



Invest in strong
partnerships to
facilitate
apprenticeships

