



R&D Consortia: Assessing Strategic Fit

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Group results

Key data 2015



€12.08 bn

Sales

+ 2.7%

Core volume
growth

€ 1.64 bn

Adjusted
EBITDA

€ 0.34 bn

Net income

EBITDA: earnings before financial result, taxes, depreciation and amortization

At a glance

Structure / 2015 Sales



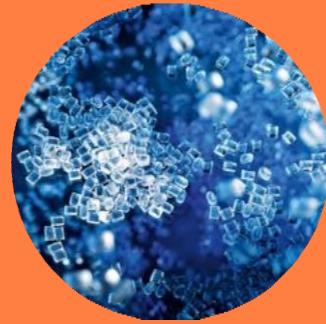
Polyurethanes



Raw materials
for rigid and
flexible foams

50%

Polycarbonates



Granules and
sheets for a
wide variety of
applications

26%

Coatings



Raw materials
for coatings,
adhesives and
specialties

17%

Basic Chemicals



Chlorine
production
as the backbone
for product
manufacture

6%

Industries
Percentage
sales

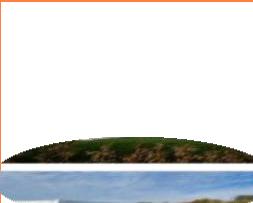


Automotive/
transportation



22%

Construction



19%

Wood/
furniture



18%

Electrical/
electronics



13%

Chemicals



9%

Sports/leisure,
cosmetics,
health



19%

in total

Innovation – an important growth driver



Around **1000** researchers and developers are working at innovation centers around the world – from Leverkusen to Shanghai and Pittsburgh.

EUR **250** million spending for research and development

146 patents on new applications (2014)

Cooperation with scientific institutions and partner companies



My Job: Innovation Management, North America

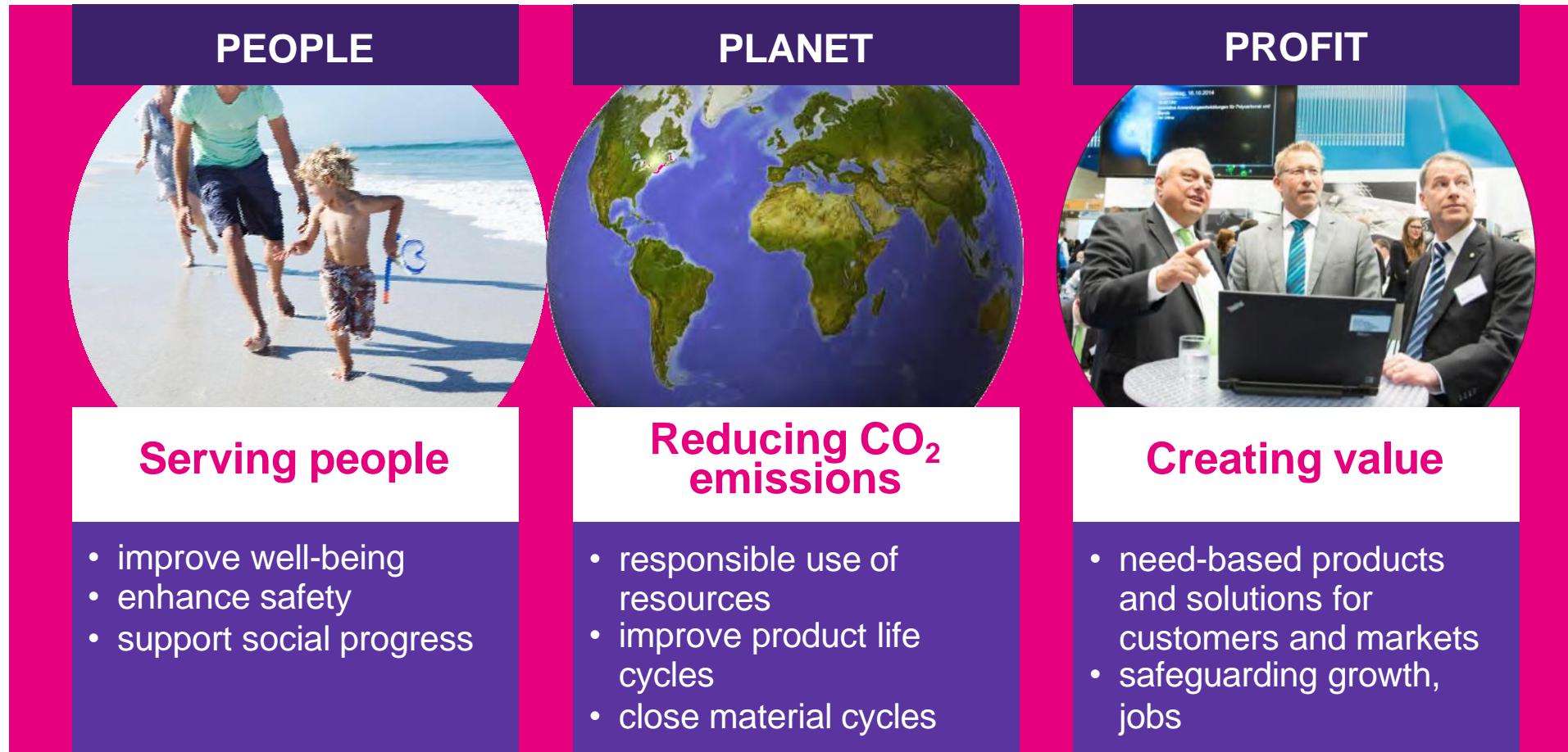
Mission: Leverage external knowledge to enable business growth.



Positioning

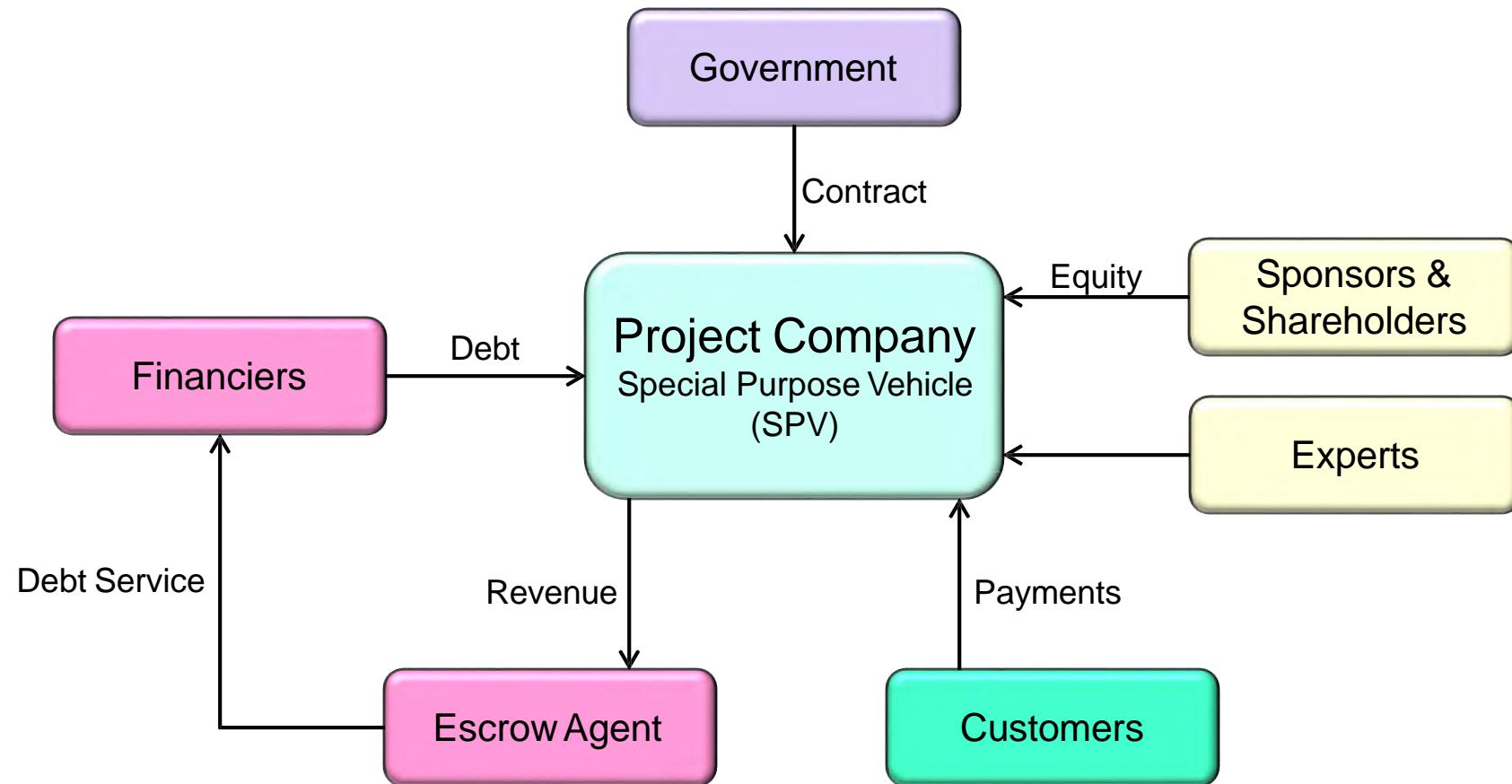


Covestro typically receives 4 – 6 consortium membership invitations each year



First question: Does it fit with our vision and values? Any new endeavor must benefit at least two and not hurt the other!

Typical Consortium Structure



Handling requests to join a consortium:

What role are we asked to play?



As a possible sponsor ...	As a possible customer ...
<ul style="list-style-type: none">• Define the ask<ul style="list-style-type: none">• Out of pocket expenses• Personnel commitment• Define the proposed investment return<ul style="list-style-type: none">• Equity stake?• IP ownership or rights?• Services provided?• Other?• Define the sustaining (or exit) strategy<ul style="list-style-type: none">• When and how will initial investments be recovered? Direct? Indirect?• When and how will the engagement become cash flow positive?	<ul style="list-style-type: none">• Determine the development relationship<ul style="list-style-type: none">• Define the starting project portfolio• Is the development transactional or collaborative?<ul style="list-style-type: none">— Shared risks and rewards? Fee for service?— How is IP shared and protected?• Will engagement on specific projects reduce development costs and/or risk? Accelerate development?• Determine post project expectations<ul style="list-style-type: none">• Will the SPV expect license fees for technologies brought to market?• Will the SPV be free to license jointly developed technology to competitors?

These framing questions help guide our decisions internally



How does it help us grow our business?

- Is it essential to our core business?
- Does it help us expand our current offerings into new markets?
- Does it help us create higher margin products?
- Can it potentially be a disruptive innovation?

How does it make us more efficient?

- Can it do development at a lower cost than we can ourselves?
- Does it have unique skills that we need and don't have?
- Does it create a forum to more easily penetrate interesting new markets or create new customers?



Evaluating Requests

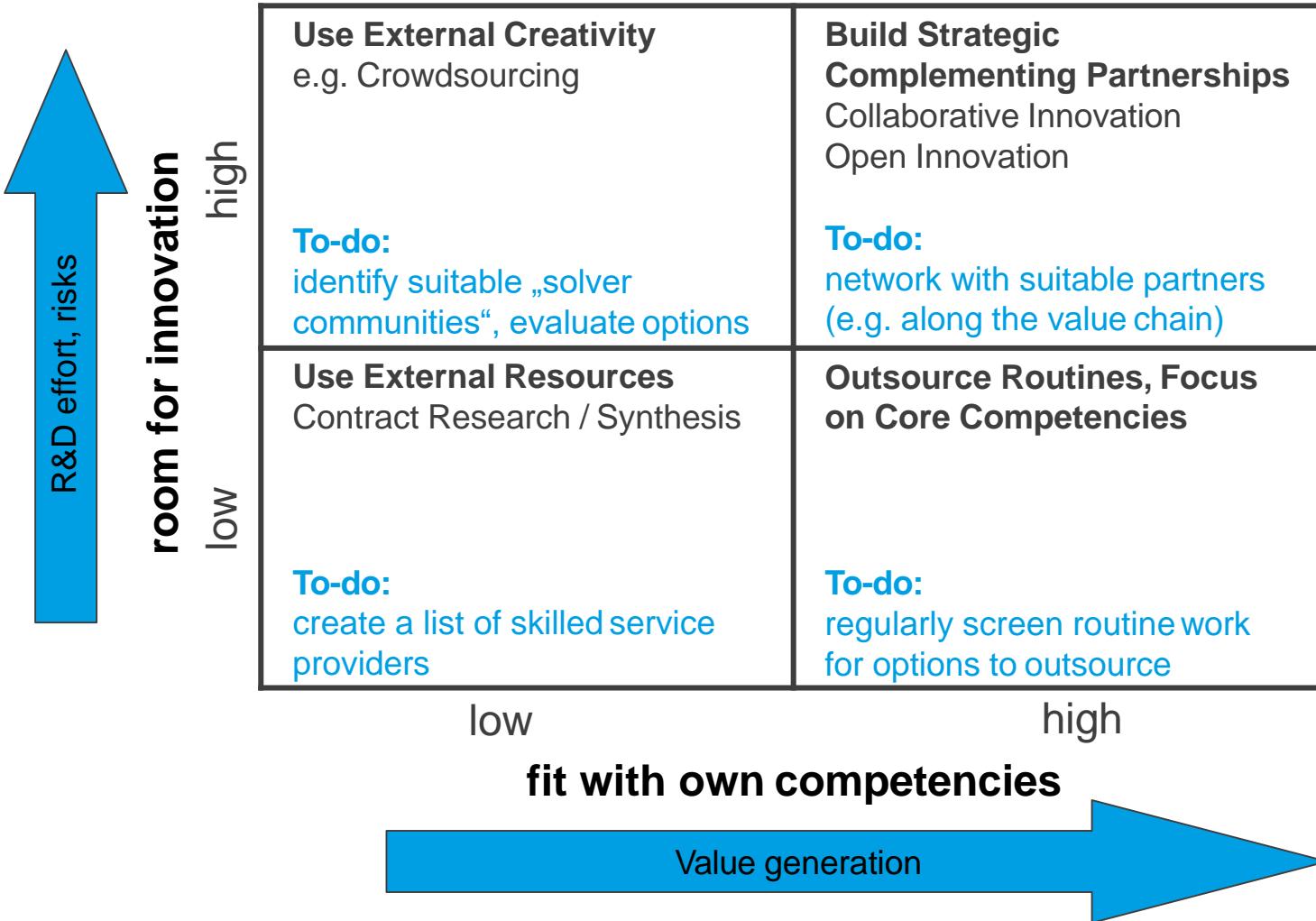
If the mission of the consortium is to create:

Disruptive Innovation	System Solutions
<ul style="list-style-type: none">○ Executive level buy-in is required.○ If alignment is strong, sponsorship is the preferred path.○ If initial exposure is large, potential reward must be several multiples higher than total investment.	<ul style="list-style-type: none">○ A confirmed value proposition with at least one of our core business units is required.○ A stage gate project management process is the preferred path.○ Keep initial exposure small. Release funds only with successful milestone achievement.○ Time to commercialization is a key metric.

Options for Collaboration:



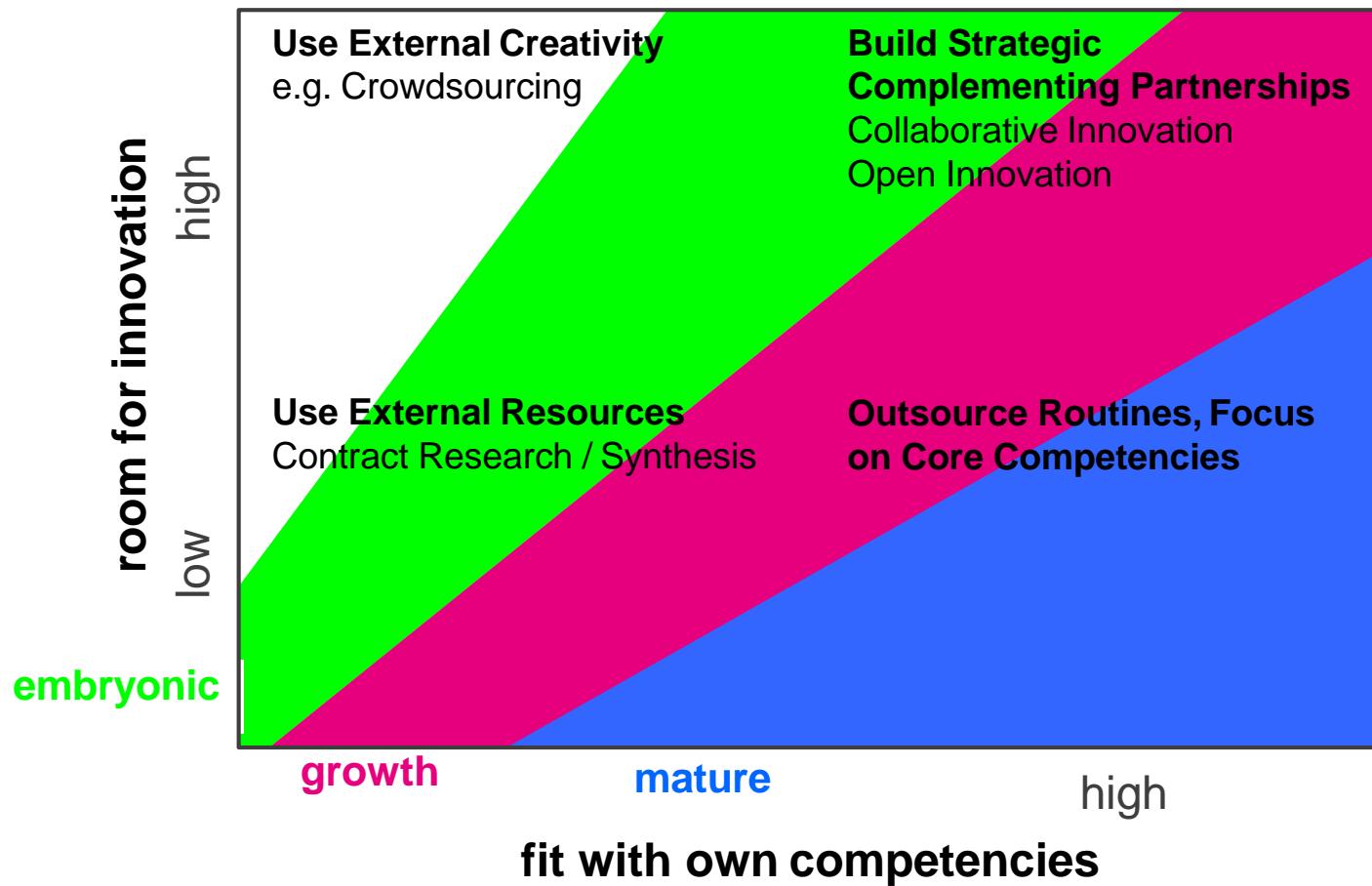
Where do consortia fit in our strategic plan



Options for Collaboration



How mature is the market?





Closing thoughts

- **Covestro is an innovation driven organization**
 - R&D consortia can be an effective means to leverage open innovation dollars.
 - R&D consortia can be useful in building new competencies.
- **When approaching us ...**
 - Please do some homework. There is a lot of information about us in the public domain.
 - Relationships are everything. Send the “A” team.
 - Define the ask.
 - Articulate a value proposition for our business.



Thank you for
your attention

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