

“CDplus is a start-up that is active in sensoric for early warnings of gear box condition or damages”

**This case study shows the transformation of this start-up business model thanks to the CircularStart training materials.**










**Sector/Activity:** Mechatronic  
**Circular Business Model Category:** Uphill / Tophill  
**Circular Business Model Strategy(ies):** Maximising Production Efficiency / Circular sourcing / Life Extension Services / Results oriented services  
**Circular Start-up type:** Design / Service based

**STARTING POINT:**

**Mission:** Support the industry into the next intelligent century

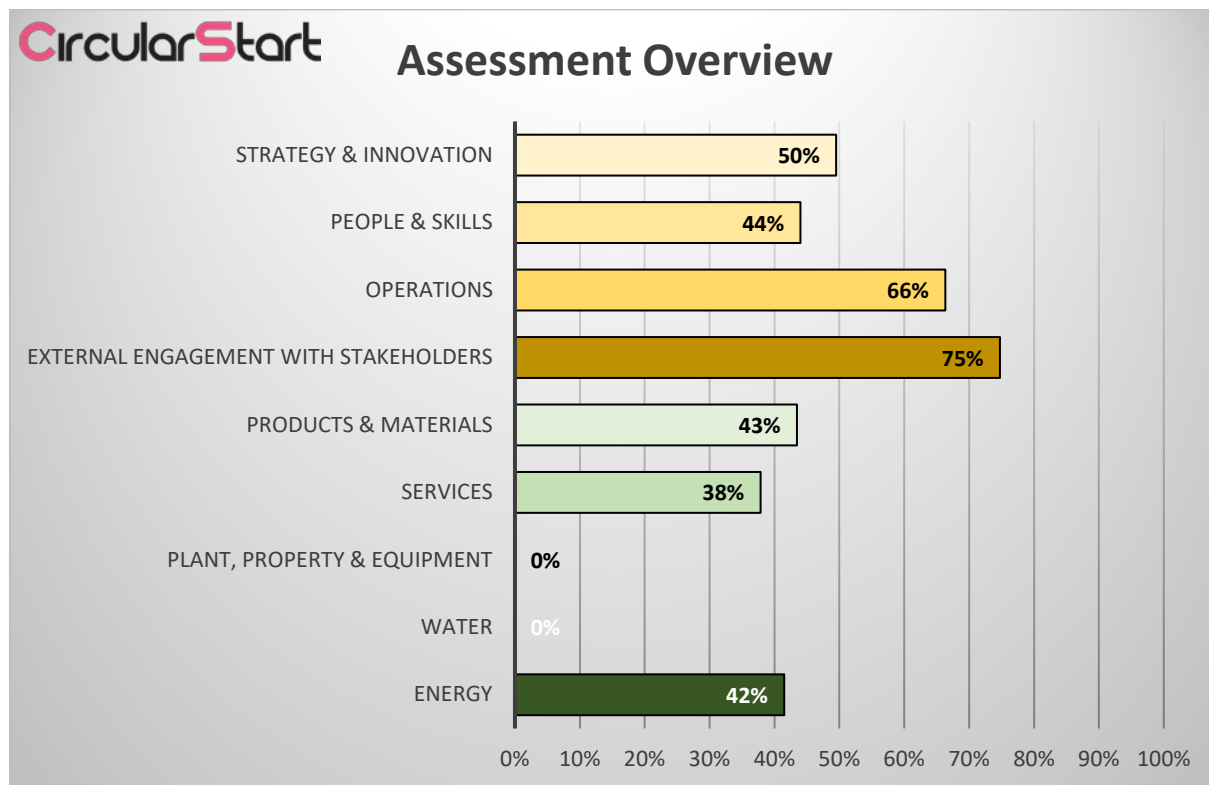
**Vision:** The future standard in condition monitoring for gear boxes

**Values:** Realtime monitoring and control with the measurement of an additional new quality indicator for gear boxes to reduce critical losses and damages in/of helicopters

 <b>KEY PARTNERS</b>	 <b>KEY ACTIVITIES</b>	 <b>VALUE PROPOSITION</b>	 <b>CUSTOMER RELATIONSHIPS</b>	 <b>CUSTOMER SEGMENTS</b>
	 <b>KEY RESOURCES</b>	Realtime monitoring and control with the measurement of an additional new quality indicator for gear boxes to reduce critical losses and damages in/of helicopters	 <b>CHANNELS</b>	<ul style="list-style-type: none"> <li>- Helicopter producer and</li> <li>- regulatory agency</li> </ul>
 <b>COSTS</b>		 <b>REVENUES</b>		



Initial circularity profile – Results from the application of the Assessment Tool



**FOLLOWED LEARNING PATH:**

Units	IDEATION	INTEGRATION	VALIDATION	IMPLEMENTATION
Unit 1	x		x	
Unit 2	x	x		x
Unit 3	x	x		
Unit 4	x			
Unit 5				
Unit 6				
Unit 7	x			
Unit 8	x			
Unit 9				












**FINAL CIRCULAR BUSINESS MODEL:**

**Mission:** Support the industry into the next intelligent century

**Vision:** The future standard in condition monitoring for gear boxes

**Values:** Realtime monitoring and control with the measurement of an additional new quality indicator for gear boxes to reduce critical losses and damages in wind energy transformation units, helicopters, ropeways, ship engines

 <b>KEY PARTNERS</b>	 <b>KEY ACTIVITIES</b>	 <b>VALUE PROPOSITION</b>	 <b>CUSTOMER RELATIONSHIPS</b>	 <b>CUSTOMER SEGMENTS</b>
<ul style="list-style-type: none"> <li>- Gearbox producer for windmills</li> </ul>	<ul style="list-style-type: none"> <li>- RandD</li> <li>- cooperation for integration and services</li> </ul>	<p>Realtime monitoring and control with the measurement of an additional new quality indicator for gear boxes to reduce critical losses and damages in/of helicopters</p>		<ul style="list-style-type: none"> <li>- Helicopter producer and regulatory agency</li> <li>- Gearbox producer for windmills</li> </ul>
 <b>KEY RESOURCES</b>		 <b>CHANNELS</b>		
<ul style="list-style-type: none"> <li>- People; tech know-how miniaturisation</li> </ul>		<ul style="list-style-type: none"> <li>- Web based app and data exchange</li> </ul>		
 <b>COSTS</b>			 <b>REVENUES</b>	
<ul style="list-style-type: none"> <li>- Cost saving for operator, maybe lower energy costs</li> </ul>			<ul style="list-style-type: none"> <li>- Additional licences for different customers over time</li> </ul>	

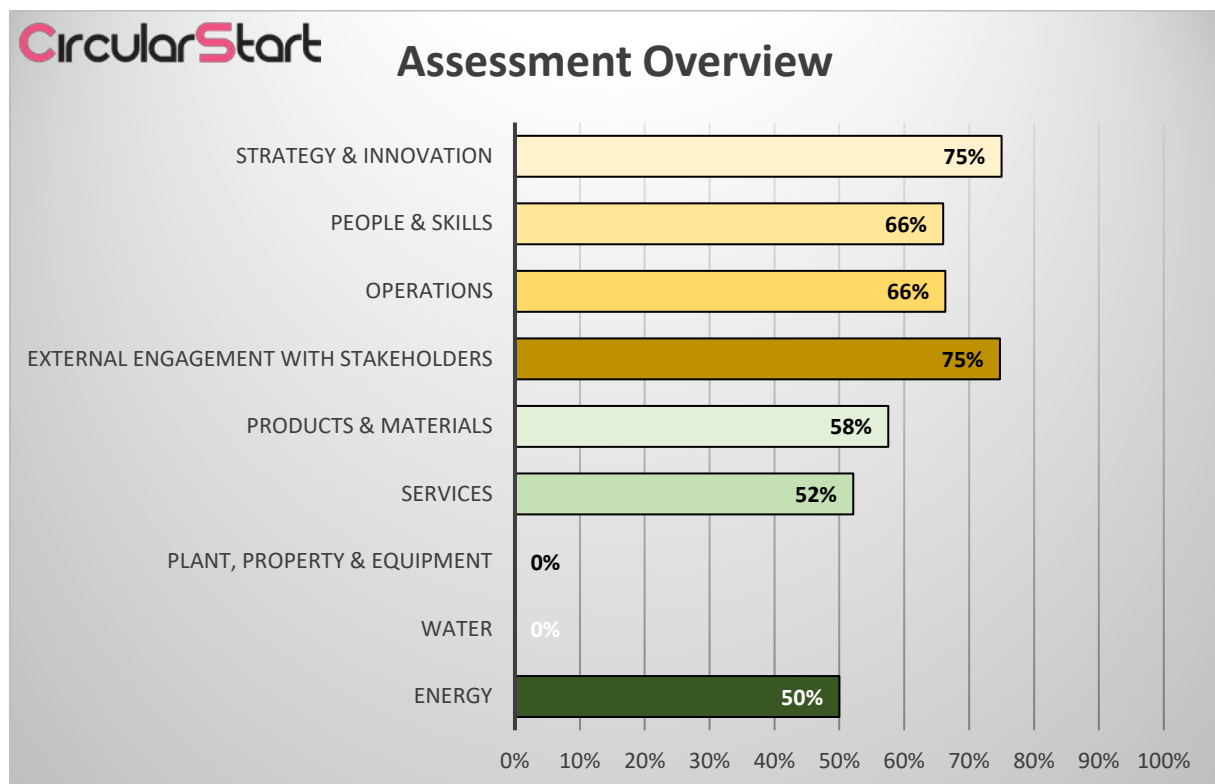


**WHICH ELEMENTS/CHARACTERISTICS OF THE BUSINESS IDEA/MODEL WERE IMPROVED THANKS TO THE CIRCULARSTART MATERIALS?**



- + **Customer:** + find out the potential of the value in the renewable wind energy sector
- + **Key resources:** + Data generation for optimise and innovate the operation in a more efficient, safer and a higher availability of renewable wind energy transformation and in other industry applications
  
- + **Value:** potential for scalability into different branches, extended lifetime of gear boxes and its resources by reducing costs

**Resulting circularity profile – Results from the application of the Assessment Tool**



## NEXT STEPS

WHAT	WHEN	HOW (People, Resources needed)	POSSIBLE DIFFICULTIES?
Further stakeholder problem centred interviews and validate hypothesis regarding value functions sustainability	Till the end of summer 21	Founders	get them for an interview, no specific need
Payed pilot field demonstration with stakeholders	Till the end of summer 21	Founders and pilot customers	Amount of paying stakeholders for field demonstration, get relevant financed

## KEY MESSAGES



- + *“Well overview for our situation for that sustainability topic”*
- + *“We got ideas for additional sustainability stakeholder validation”*
- + *“Get deeper insights in sustainability and its meaning”*
- + *“Good approach that sustainability is in the focus by developing the business”*

