

The role of industry in supporting a circular economy

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OUTLINE

Circular economy

What about water?

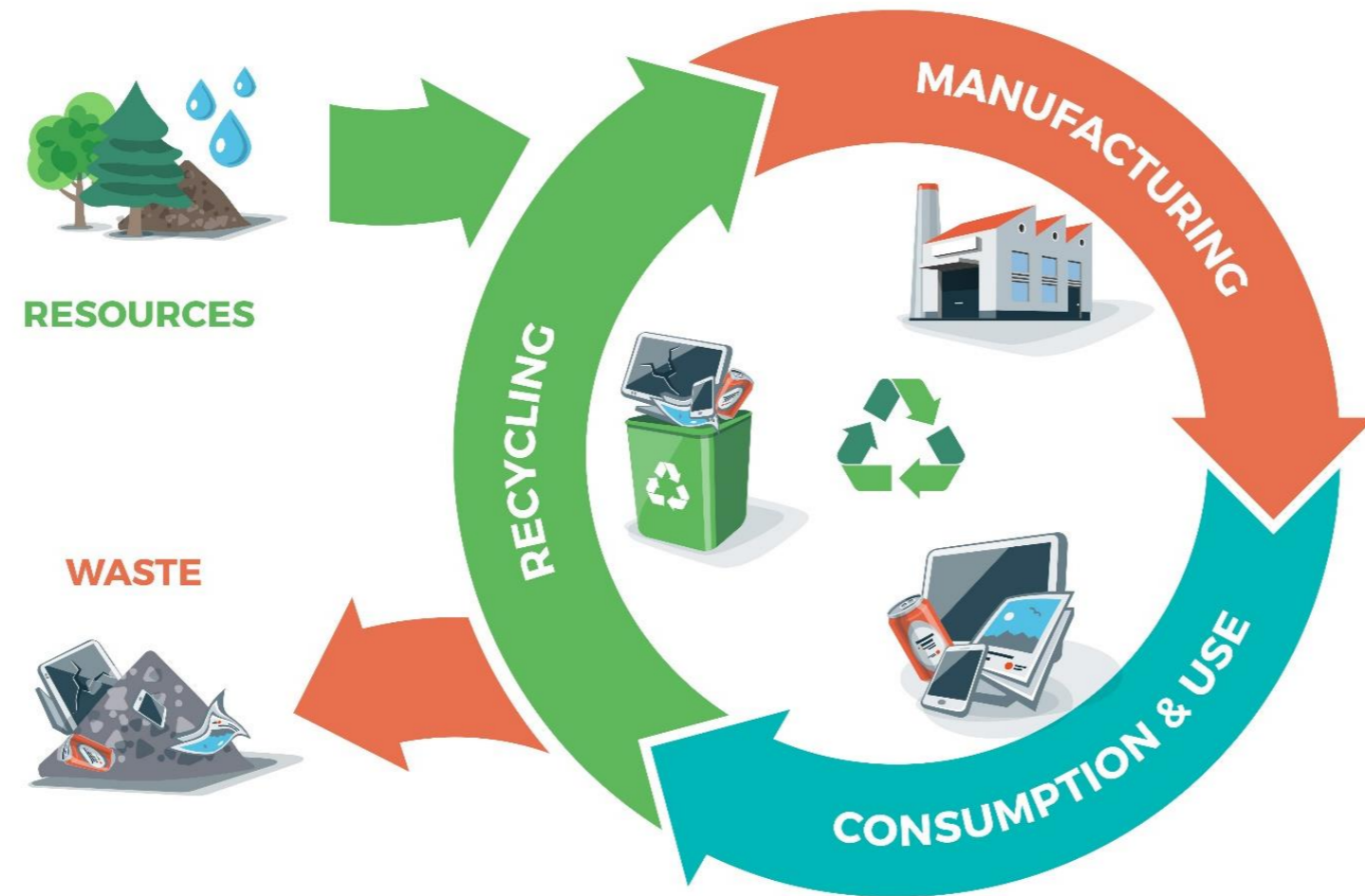
Integrated water resource management

Circular economy for water

Conclusions

WHAT IS A CIRCULAR ECONOMY ?

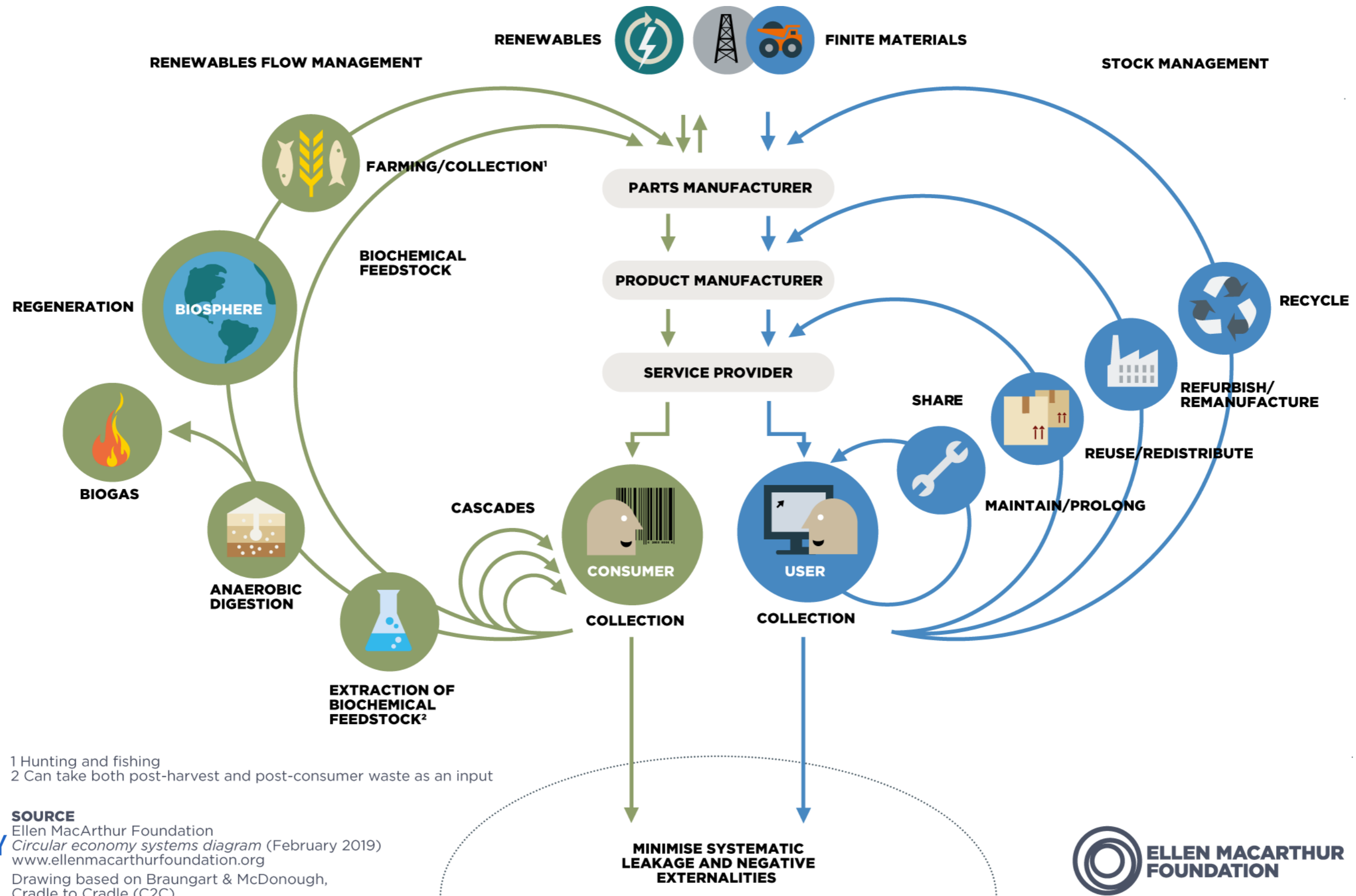
CIRCULAR ECONOMY



WHAT IS A CIRCULAR ECONOMY ?



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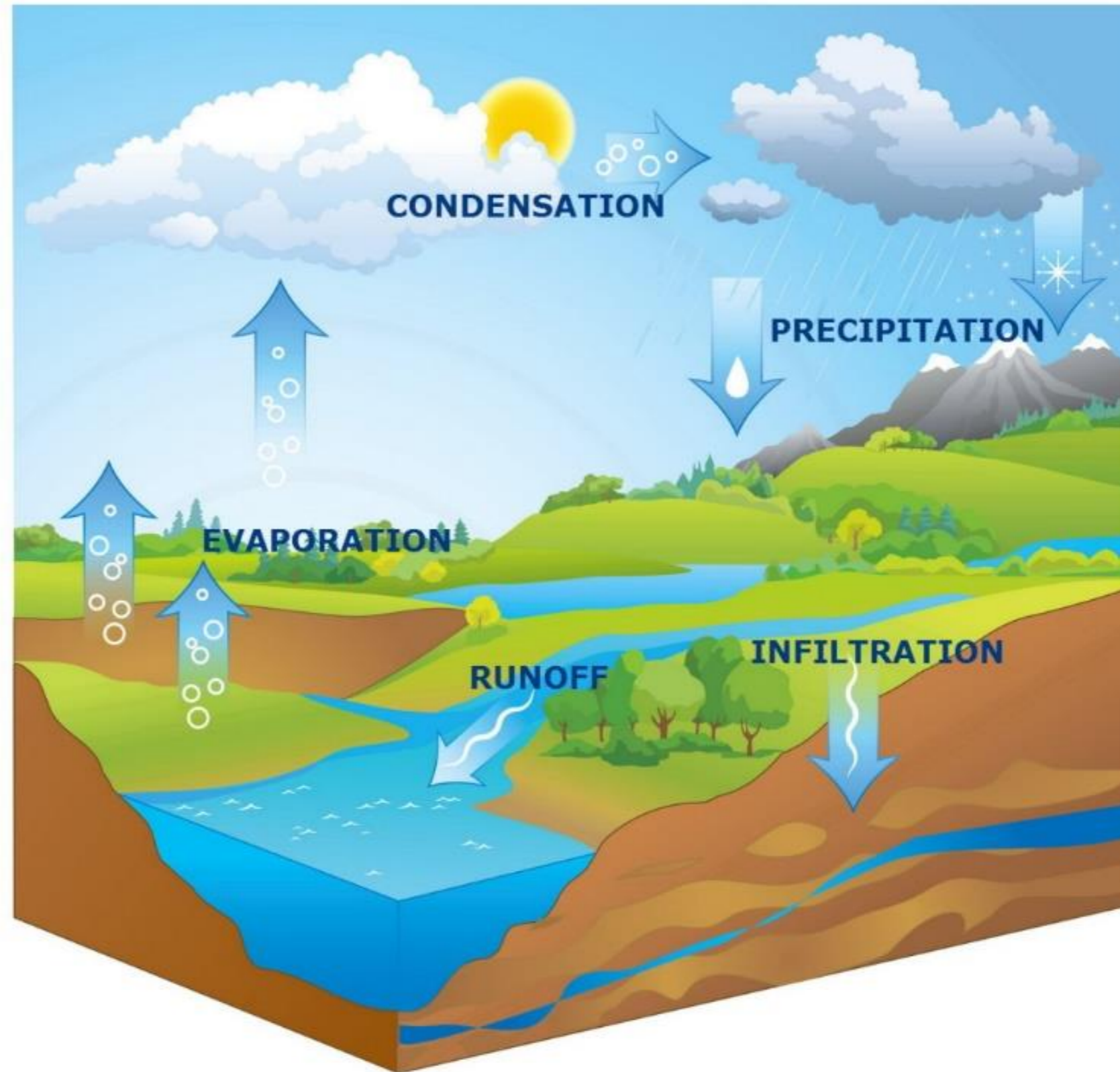


1 Hunting and fishing
2 Can take both post-harvest and post-consumer waste as an input

SOURCE
Ellen MacArthur Foundation
Circular economy systems diagram (February 2019)
www.ellenmacarthurfoundation.org
Drawing based on Braungart & McDonough,
Cradle to Cradle (C2C)

WHAT ABOUT WATER ?

Water cycle



WHAT ABOUT WATER ?

Human water use pattern: similar to our traditional linear economy for other resources

TAKE  USE  DISCHARGE

Problems: overextraction/inefficient use/pollution

Not sustainable !!

INTEGRATED WATER RESOURCE MANAGEMENT

“IWRM is a participatory planning and implementation process, based on sound **science**, which brings together **stakeholders** to determine how to meet society’s **long-term needs** for water and coastal resources while maintaining essential **ecological services** and **economic benefits**.”

INTEGRATED WATER RESOURCE MANAGEMENT

Some positive aspects:

- Recognition of complex nature of water resource management
- Focus on sustainability

Next level integration:

Food-energy-water nexus

CIRCULAR ECONOMY FOR WATER

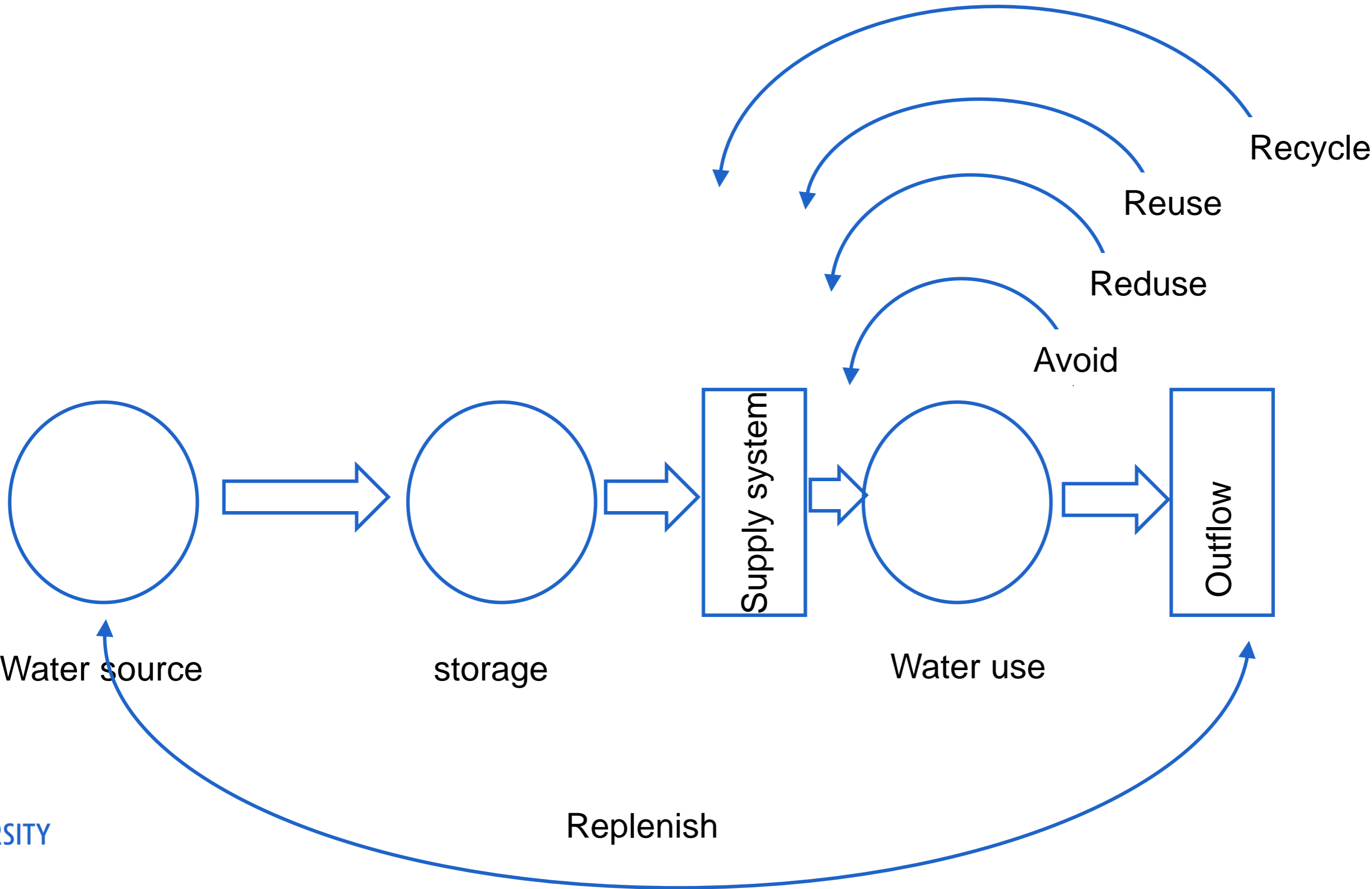
Added value of circular economy lens??

Consider 3 core principles

- Design out waste externalities
- Keep resources in use
- Regenerate natural capital

Potential Gains for each of these

CIRCULAR ECONOMY FOR WATER



CONCLUSION

A lot is already happening in the industry sector:
Recycling, reuse...

Gains still possible through

- Further embracing systems thinking to close loops
- Identifying spill over effects for other systems
- Consciousness about virtual water contents



Thank you for your attention