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CIRCULAR ECONOMY:  
PART OF A CHANGED  
PERSPECTIVE OR A  
PRACTICAL RESOURCES  
FIX? CAN IT BE BOTH?

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### CONTEXT FOR THE ACTIVITY

This activity is based around the work of Kate Raworth whose book *Doughnut Economics* (Raworth, 2017) provides a summary of the origins and consequences of our current understanding of the economy and contrasts it with the emerging understanding of an economy based on a contemporary 21st century science. In her ‘seven habits of thought’ for the 21st century, the circular economy is included as ‘regenerative by design’. A number of the others she describes will be familiar to readers of circular economy publications and case studies of practice: the embedded economy (the basis for the Ellen MacArthur Foundation logo!) showing economy, society and environment as nested circles; and the notion of ‘dynamic complexity’. The activity here is based on understanding Raworth’s two different approaches to thinking about economics - and their roots. But, as importantly, this activity helps reflection on the question: how far is the circular economy a materials and resources fix for the existing economy or is it part of not just a transition but a **transformation** in how we see the economy and what we expect from it? Or, indeed, can it be both - it is only time that separates the two? The answer to these questions matters because it informs the kind of ‘system conditions’ or ‘rules of the game’ which need to be applied to advance change.

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\* The reference in the title is to the ‘sandwich and cake’ analogy used in Activity 1. It is a further exploration, a snack for later.

## RESOURCES AVAILABLE

- 8:R1a Intro PPT slide
- 8:R1 The circular economy – a description (as evidenced widely)
- 8:R2 Large flip chart or presentation screen with core R1 messages and room to annotate
- 8:R3 PPT on 20th century economic thinking (sequenced slide set)
- 8:R4 Kate Raworth animations: *Design to distribute; Change the goal - aim for the doughnut; Be agnostic about growth*  
<https://www.kateraworth.com/animations/>
- 8:R5 PPT builds out into Kate Raworth's 21st century economic thinking (sequenced slide set)
- 8:R6 Summary diagram of 20th and 21st century economic thinking (modified and annotated)

## ORGANISATION

- Small group discussions on a circular economy description
- Plenary and dialogue around two PPTs

## TASK(S) AND RUNNING ORDER

## GUIDANCE FOR FACILITATORS INCLUDING DEBRIEFING NOTES

*A Doughnut for Later?* assumes that participants have some experience of the basics of a circular economy in terms of the generalised notion of designing out the idea of waste, keeping products, components and materials at their highest value and, notionally at least, restoring and regenerating capitals.

The background briefing for the workshop facilitator is by reading excerpts from *Doughnut Economics*, or by watching a Kate Raworth TEDx talk <https://www.kateraworth.com/2014/12/17/why-its-time-for-doughnut-economics-new-from-tedx-athens/>

... and/or by watching the seven short (1-2 minute) animations provided by Kate Raworth: <https://www.kateraworth.com/animations/> Three of these are used as R4 (animation number 1, 5, 7).

# TASK 1

R1 is a description of the circular economy. Distribute R1 as the task's core text to groups of two people or more - sufficient for one copy between two. Ask participants to read the contents individually and discuss the contents in their groups. It is a generalised description of the circular economy narrative as it is commonly shared, broken down into numbered statements for ease of discussion. Ask participants to discuss in their groups:

- 1) Small group discussions on a circular economy description
- 2) Plenary discussion about the circular economy description. Followed by PowerPoint presentation (R3) about 20th century economic thinking (sequenced slide set)
- 3) PowerPoint presentation (R5) about Kate Raworth's 21st-century economic thinking (sequenced slide set)
- 4) Final plenary using the last slide of PowerPoint R5 to prompt discussion on whether circular economy is part of a changed perspective or a practical resources fix.. or both.

## TIMINGS

Overall approximately 70 minutes. Task 1: 15-20 mins after personal reading time of 3 mins; Task 2: 15 mins; Task 3: 10-12 mins for PPT 5 (plus optional 3x animations – 6 mins); Task 4: 15-20 mins.

## AIM OF THE ACTIVITY

To consider to what extent having a particular world-view, and perspective on economics, affects the idea, scope and direction of travel of a circular economy. This activity suggests characterisations which can be useful tools in thinking through the question.

In plain English, is the circular economy a fix for materials and resources issues or is it part of a shift to a understanding the economy differently? Or is it both? This activity helps to explore these questions.

Which of these statements in R1 do you agree with/disagree with?  
Which would you modify, why?  
What is missing, why should it be included?

# TASK 2

As facilitator, prepare R2 - a large flipchart or presentation screen with core R1 messages and room to annotate. In a plenary, use R2 to build up annotations based on feedback from groups around the questions above. The narrative for circular economy on R1 is fairly simple and intuitive. Many participants will not be surprised but expected lines of modification/challenge could include those listed below. None of these, or any of the others, is meant to be answered, this is not a defence of the narrative. Rather, ask for clarification and additional thoughts. Reflect back or invite comment from within the whole group with questions like: "Do you agree/disagree...?" "How does this circular economy description fit with...?" "What do you want to add?"

Some lines of thought:

- a) Isn't this just 'sustainable materials management' but without the CSR angle – why is it missing?
- b) What about the role of consumer, citizen and non-profits? What about the entrepreneur?

## GUIDANCE FOR FACILITATORS INCLUDING DEBRIEFING NOTES (continued)

c) Is there evidence that the existing economic model is working well in other respects apart from resources?

d) What other factors affect economic growth? For example, is the level of indebtedness significant? Is economic growth the main aim anyway?

e) What part of the benefits of lowering of costs will accrue to the consumer and lead on to more expenditure and jobs? What if wages are stagnant and falling and some/most of the gain is captured by producers, or in housing and other costs?

f) There's nothing much on the role of government in a fiscal and monetary sense. Does this matter?

g) The circular economy is a toolbox which lets us decide better what it means to be productive, so don't sweat it. Won't society decide how and where it best operates?

Towards the end of the plenary, focus in on the notion that perhaps the **circular economy can be seen as a transition that fits the existing economic model.**

Use the PowerPoint R3 to consolidate this 'transition' idea before moving on to the broader challenges around the existing model which will have surfaced to some extent in the feedback along the lines of that in (d) part 2, (c) and (e) above.

The use of PowerPoint R3 about 20th century economic thinking does require facilitator knowledge of the key points underlying the diagrams. This is easy to acquire from the Raworth animations but in essence the habits of 20th century economists, at least in the common understanding of it, are around mechanistic or pipework analogies for the economy. In the long run: the economy is always assumed to be at equilibrium; the interaction of supply and demand, the price mechanism and competition ensure efficient use of resources; and the aim is economic growth, as this lifts all living standards and growth also solves the problem of waste and pollution by creating the wealth that will enable modern technological solutions. The flow of income and expenditure between households and firms is essentially circular but, most importantly, it is the market and monetary dimension of these relationships. The decisions people make are based on them being 'selfish' rational individuals looking for maximum satisfaction, irrespective of what others decide.

The role of government is to enable competition and cover minimum necessary welfare, regulatory and security activity.

Arguably, the circular economy could be seen to modify the existing economy by making it more embedded – resources matter and these stocks and flows can be viewed differently; waste is to be a resource or waste can be designed out through regenerative design. Use the final slide of PowerPoint R3 to bring together discussion on the notion that the circular economy can be seen as a transition that fits the existing economic model.

## TASK

# 3

However, then progress to use PowerPoint R5 to move the argument towards another notion that for some people the circular economy is much more than this – for them, it is about feeding from a shift on how we see the economic system working. From that, comes different ideas about how to manage it, and how to participate.

The Kate Raworth animations numbers 1, 3 and 5 (R4) are an optional/additional way of introducing this argument.

Use PowerPoint R5 to contrast the existing economic model with the new 'habits of thought' model, that is derived from the same underlying rationale as that of the circular economy: which is 'circularity', broadly understood. Or, more prosaically, it's about understanding the world as composed of complex adaptive systems, full of feedback. It's intuitive enough: mechanical systems work like this (deterministic machines or pumps and pipework) ... they are a special case of real world systems which are feedback rich, non-linear, dynamic, and, well ... thirty years after the popular books on 'chaos theory' and complexity the fundamentals are still often unfamiliar, and their perceived relevance somewhat distant (see Supplementary Resources for quick briefings on complex systems). The summary with this PowerPoint presentation is to point out to participants that, by using insights from complexity science, different ideas are emerging about how we make decisions, the aims of economic activity, the relationship of this to economic growth, how we produce and how this might work at all scales – since they are fundamentally interdependent.

## TASK

# 4

The final slides of PowerPoint R5 (and the diagram on resource sheet R6) summarise the two modes of thinking side by side and they serve as a jumping off point for the final plenary. In this final task, focus the discussion around whether the circular economy is:

- a) A toolbox about what it means to be productive – it can be used anywhere
- b) A 'transition' approach to fix up the existing economy from a resources perspective – drawing materials into the 'pipework'
- c) Part of a shifting worldview which entails different principles, opportunities and challenges – a harbinger of change and transformation
- d) An approach which begins at (a) and, over time, ends up at (c) Does it matter, and, if so, to which stakeholders?

### SUPPLEMENTARY RESOURCES

Understanding complexity. The basic ideas around how these systems work, the tools for systems thinkers, are available at:

<https://tinyurl.com/ycusyke6>

More detailed opportunities are found at <https://www.complexityexplorer.org/>

The role of systems perspectives in economics is nicely illustrated in the work of businessman and self-styled 'plutocrat' Nic Hanauer and his cooperation with leading complexity economist Eric Beinhocker.

<http://economics.com/redefining-capitalism-eric-beinhocker-nick-hanauer/>

### REFERENCES AND FURTHER READING

Aberkane, I. (2016) From waste to kwaste: on the Blue Economy in terms of knowledge flow. CS-DC'15 World e-conference, Sep 2015, Tempe, United States. Available at:

<https://hal.archives-ouvertes.fr/hal-01291106/document>

Fullerton, J. (2015) *Regenerative Capitalism -How Universal Principles And Patterns Will Shape Our New Economy*. Capital institute. Available at: <http://capitalinstitute.org/wp-content/uploads/2015/04/2015-Regenerative-Capitalism-4-20-15-final.pdf>

Hanauer, N. and Beinhocker, E. (2014) Capitalism Redefined - what prosperity is, where growth comes from, why markets work, and how we resolve the tension between a prosperous world and a moral one. *Democracy* Winter 2014. Available at: <https://democracyjournal.org/magazine/31/capitalism-redefined/?page=all>

Raworth, K. (2017) *Doughnut Economics. Seven Ways to Think Like a 21st-Century Economist*. Random House

Webster, K. (2017) *The Circular Economy - a wealth of flows*. 2nd edition. Ellen MacArthur Foundation

# THUMBNAIL RESOURCES

CLICK TO DOWNLOAD HIGH RESOLUTION VERSIONS FROM BELOW

## 8:R1a Intro PPT slide

**8:R1a ACTIVITY 08: A DOUGHNUT FOR LATER?**

**KEY ENQUIRY**  
Circular economy: part of a changed perspective or a practical resources fix?  
Can it be both?

**TASK(S)**  
1) Small group discussions on a circular economy description (Time)  
2) Plenary discussion about the circular economy description. Followed by PowerPoint presentation (R3) about 20th century economic thinking (sequenced slide set) (Time)  
3) PowerPoint presentation (R5) about Kate Raworth's 21st-century economic thinking (sequenced slide set) (Time)  
4) Final plenary using the last slide of PowerPoint R5 to prompt discussion on whether circular economy is part of a changed perspective or a practical resources fix.. or both (Time)

## 8:R1 The circular economy - a description (as evidenced widely)

**8:R1 THE CIRCULAR ECONOMY - A DESCRIPTION**

The way the circular economy has become a simple, easily shared narrative is a strength. The narrative is based around these points:

- 1** The problem is that how we deal with resources (including energy) is getting in the way of economic growth (rising costs of extraction/environmental and social costs/feedback). Yet there are more people (including middle classes), rising demand and a need for employment. We need to decouple growth from resource use.
- 2** We need to go beyond resource efficiency to create a positive cycle. A circular economy 'flow the flow' and 'close the loop'. Do it at a growth, design out waste and by lowering costs of access and ownership improve the potential to increase spending in the economy. This leads to more jobs, safeguarding others while cutting environmental and social costs. Resource efficiency declines as more of the economy becomes circular. Ideally, closing the loop also leads to regenerating and restoring capital. It is accompanied by a shift to renewables and energy efficiency.
- 3** Business is the most active player in the economy so we need to harness their skills and inventiveness. What makes this very timely, and indeed possible, is the digital revolution which allows new (or reimagined) business models - especially in product-service systems (e.g. variations on the 'sharing economy'). Digital technologies have helped consolidate the talent of renewable energies, advanced automation, electric and autonomous vehicles, exchange platforms, reverse supply chains and 'smart cities'.
- 4** Through procurement, education, technology support, incentives and penalties, the role of government at different levels is to make/shape policy which supports this change. Government's role is to adjust regulation and to open up/enable the potential offered by disruptive technologies e.g. around the 'sp' economy'.
- 5** The circular economy fits the existing economic model by providing solutions for two elements: a) it brings resources and wastes into the 'loopwork' as assets (cf. the Aberkane (2016) said that "knowledge plus waste = asset") and b) it uses design for the whole cycle as in "cradle to cradle", not 'locking up a linear economy' so it helps embed the economy in the environment.

## 8:R2 Large flip chart or presentation screen with core R1 messages and room to annotate



## 8:R3 PPT on 20th century economic thinking (sequenced slide set)

**RATIONAL ECONOMIC MAN**

## 8:R4 Kate Raworth animations: Design to distribute; Change the goal - aim for the doughnut; Be agnostic about growth



## 8:R5 PPT builds out into Kate Raworth's 21st century economic thinking (sequenced slide set)

**THE DOUGHNUT**

## 8:R6 Summary diagram of 20th and 21st century economic thinking (modified and annotated)

**8:R6 SUMMARY SLIDE 6**

| 7 WAYS TO THINK             | FROM 20TH CENTURY ECONOMIES  | TO 21ST CENTURY ECONOMIES |
|-----------------------------|------------------------------|---------------------------|
| 1. LOOKS AT THE TOP         | GDP                          | THE DOUGHNUT              |
| 2. SEE THE BIG PICTURE      | WELL-DEFINED MARKET          | RESILIENT                 |
| 3. RATIONAL HUMAN NATURE    | RATIONAL ECONOMIC MAN        | SOCIAL RESPONSIBLE        |
| 4. SET AVOID WITH SYSTEMS   | ECONOMICALLY SOUND DESIGN    | DESIGN FOR COMPLEXITY     |
| 5. DESIGN TO DESTROY        | SECURITY WILL BREAK UP AGAIN | DESTRUCTIVE BY DESIGN     |
| 6. DESIGN TO REPAIR         | SECURITY WILL CLEAN UP AGAIN | REGENERATIVE DESIGN       |
| 7. BE AGNOSTIC ABOUT GROWTH | IDENTICAL GROWTH             | AGNOSTIC                  |