



London Waste and Recycling Board

Circular Economy Investment Strategy



LWARB
London Waste and Recycling Board

Global Opportunity for CE Investing

TABLE 1: MACRO BENEFITS OF THE CIRCULAR ECONOMY



Net materials cost savings and economic growth

The circular economy could generate (a) up to US\$520 to US\$630 billion in savings for European manufacturers per year for medium-lived complex products (e.g., office machinery and computers, medical equipment, transport equipment), (b) up to US\$700 billion in worldwide savings per year for fast-moving consumer goods (e.g., toiletries, over-the-counter drugs, processed foods), and (c) between 1 and 4 percent net economic growth over a 10-year period.



Innovation

The circular economy challenges industry to develop standardized and re-usable product components, closed-loop logistics cycles and supply monitoring tools, and service-based business models.



Environmental sustainability

Circular production and logistics relies on renewable resources, which will reduce carbon emissions, result in less extraction of raw materials, and even improve soil health and land productivity.

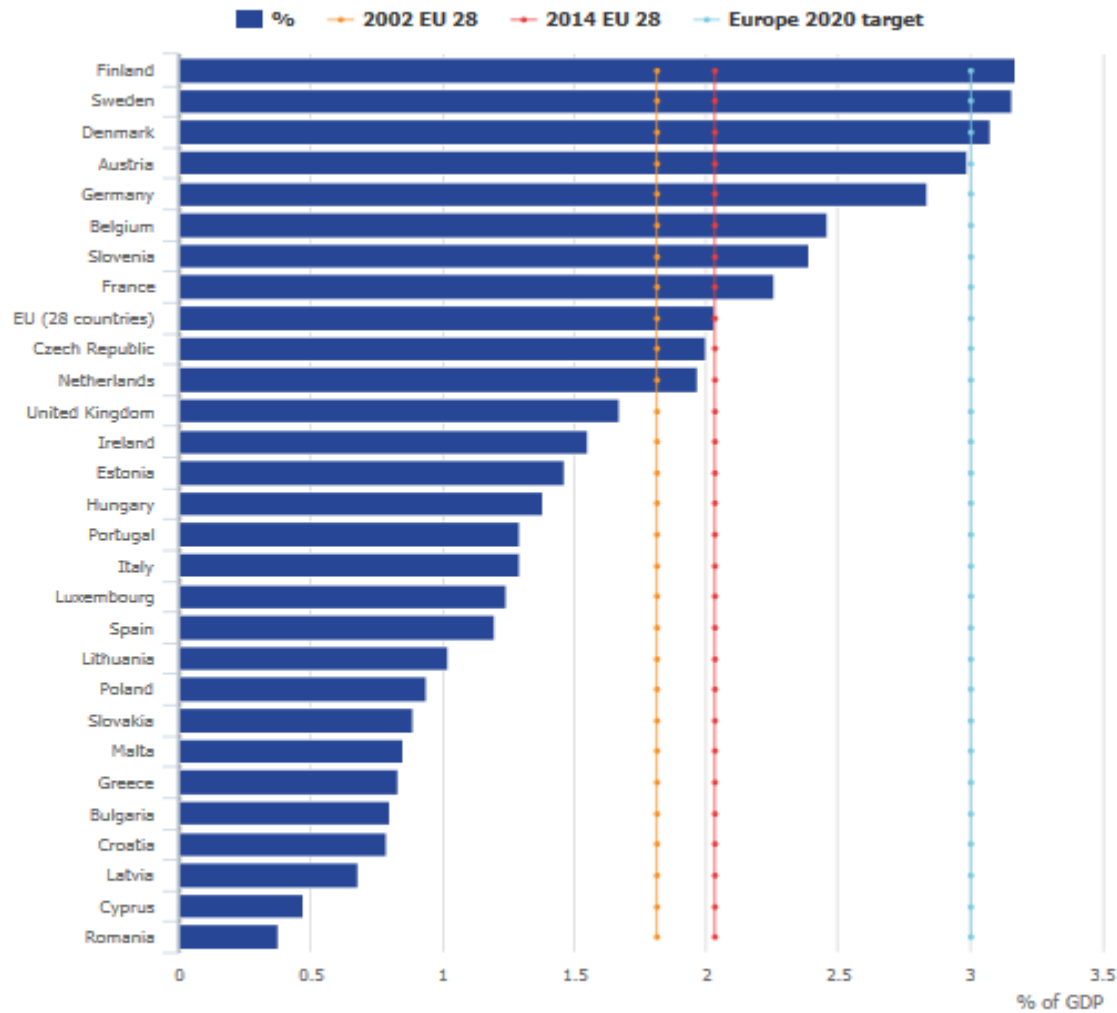


Job creation

The effects of the circular economy on labor markets are yet to be determined, but some economists contend that a transition to a more circular economy could mean some job losses in certain industries and companies but an overall net job gain globally.

Sources: ING. Rethinking Finance in a Circular Economy: Financial Implications of Circular Business Models. Amsterdam, The Netherlands: May 2015; World Economic Forum with Ellen MacArthur Foundation and McKinsey & Company. Towards the Circular Economy: Accelerating the Scale-up Across Global Supply Chains. Cologny/Geneva, Switzerland: January 2014; Johan Rockstrom and Mattias Klum. Big World Small Planet: Abundance Within Planetary Boundaries. New Haven: May 2014.

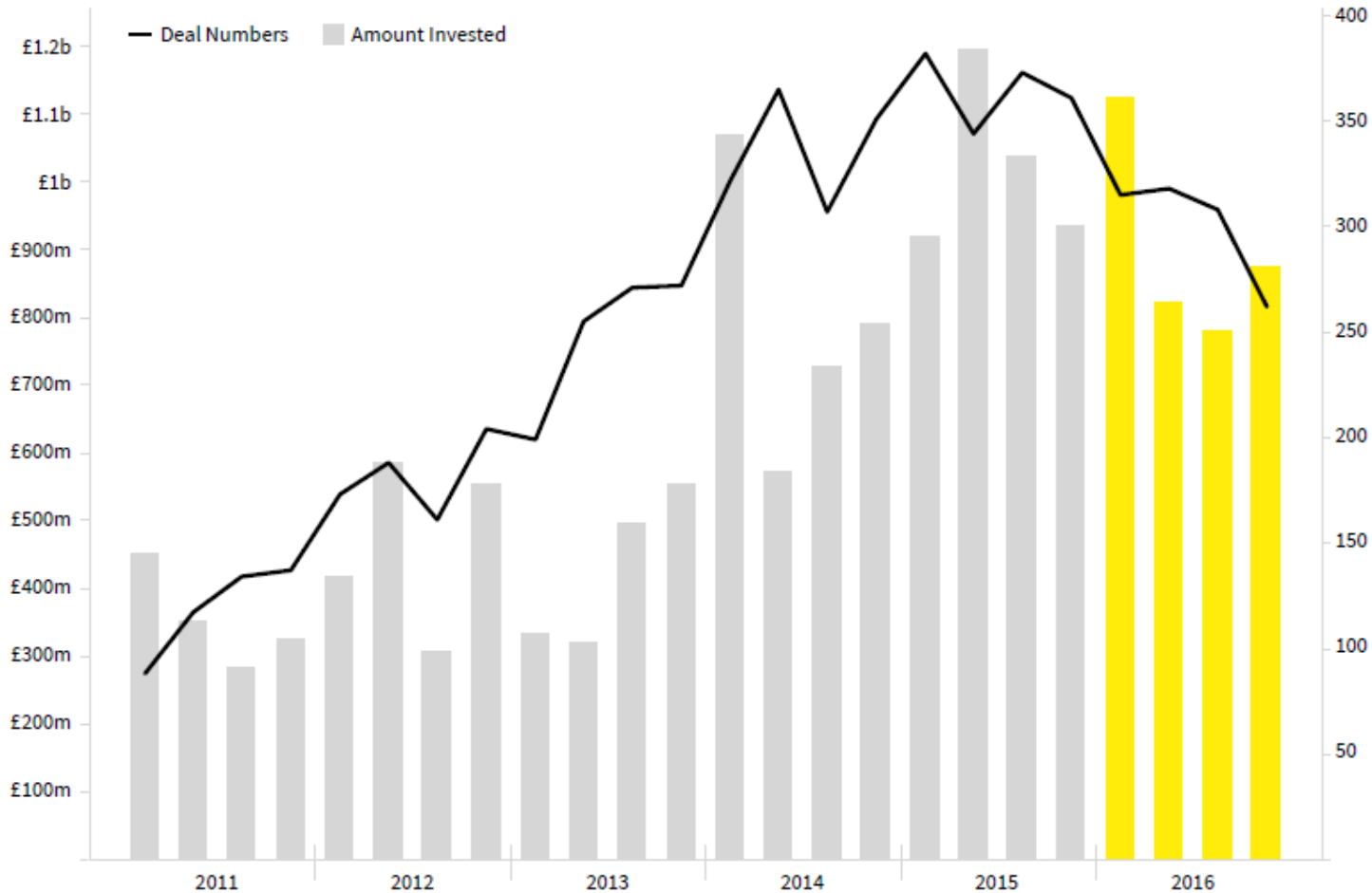
European Investment in R&D as % of GDP



Source: Eurostat

Why an Investment Programme? The London & UK Context

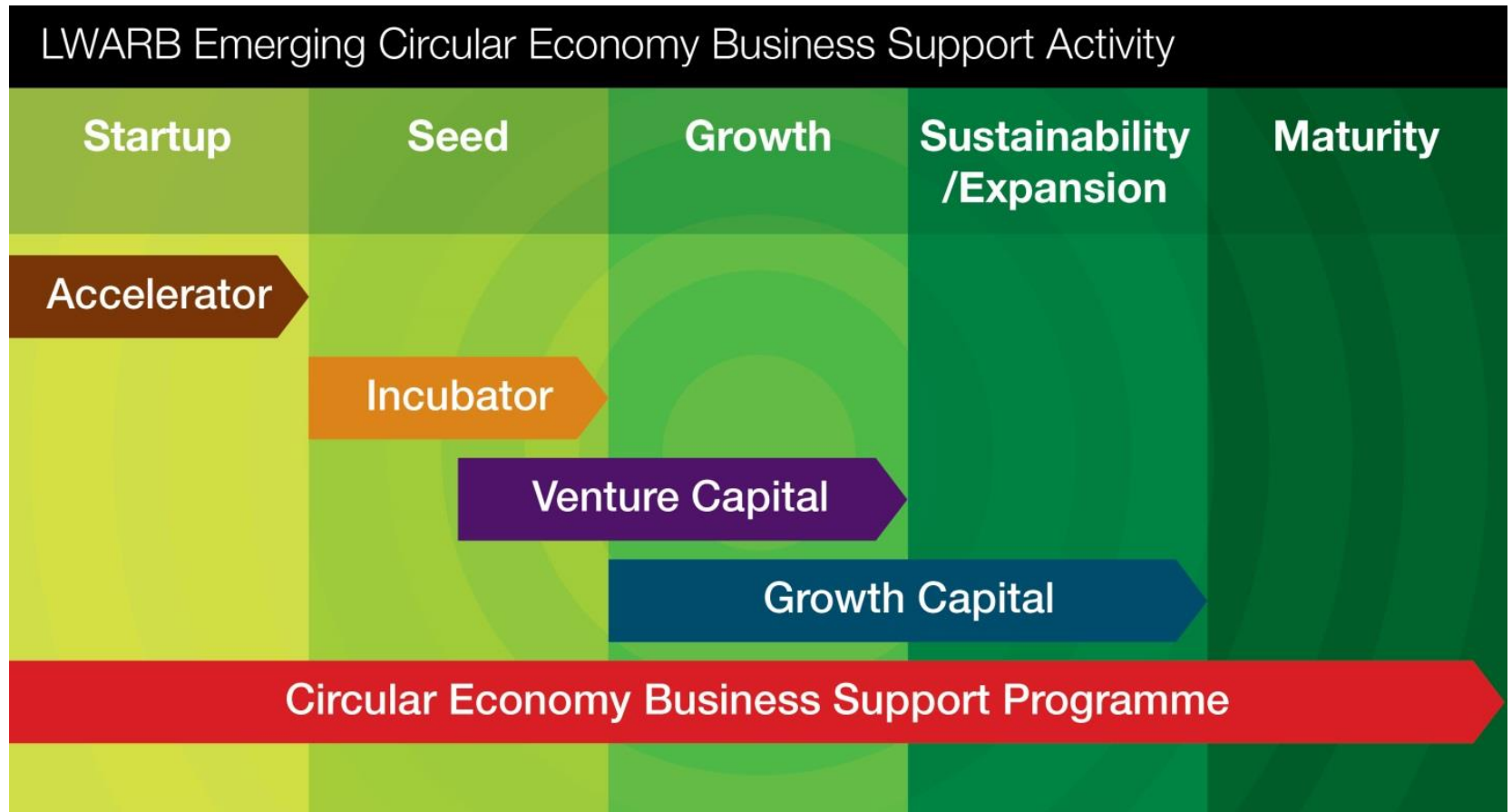
Deal Numbers and Amount Invested by Quarter



Why Public Sector Investment? The London & UK Context

- SMEs make up 99% of all London businesses and employ nearly 50% of the workforce;
- SME debt funding fell by 6% in 2016 – equity investment fell by 12%;
- Estimated to be an annual c£1.5bn funding gap for SMEs in London (debt and equity) vs demand;
- UK lags significantly behind other Developed Countries in innovation, measured in R&D spends as % of GDP – at 1.7% vs EU average of 2.1%, US at 3% and South Korea at 4.5%;
- Despite presence of world class universities, UK ranks 22nd out of 30 countries measured in commercialising research;
- Risk that inward investment will fall post Brexit – already evidence that this is happening;
- **BUT**, London has several advantages to support SME circular economy innovation investment:
 - World class academic institutions
 - Large concentration of tech firms to facilitate CE
 - Highly advanced and diverse Finance sector
 - Host to a diverse range of SMEs with a culture of entrepreneurship
 - Leading CE100 firms based in London able to influence their supply chain and provide support
- Data from 2011 to 2016 shows that if startups receive professional support through accelerator or VC then rate of failure drops from 80% to 16%!
- It is estimated that the CE focus areas alone could deliver benefits for London of at least £7bn per year by 2036 and 40,000 jobs.

Creating a Circular Economy Ecosystem



Creating a Circular Ecosystem in London

Pre Startup

- Public innovation challenges in response to some of the main circular challenges in London

Start-up

- Launched a small Accelerator programme for circular economy startups in conjunction with Sustainable Ventures – currently raising additional funds through Seedrs
- Working with partners to develop innovation centre to support best commercial ideas through funding and active support – likely launch early 2018.
- Longer-term, more value added support than typical accelerator/ incubator programme

Growth capital

- Developing circular economy focused Venture Capital fund alongside GLA and EIB
- Targeting investments into up to 50 high growth early stage circular economy businesses, capable of impacting significantly upon they Mayor's manifesto commitments
- LWARB has also invested in Europe's first private equity growth capital fund dedicated to the circular economy (managed by Circularity Capital)

Business Support

- Free business advisory support service for SMEs in London looking to transition to CE business models or scale up existing circular businesses – jointly funded by ERDF
- 1:1 support provided, objective to deliver economic value to London through new jobs and revenue streams.

Example Investments



World's 1st dedicated circular economy Private Equity Fund, providing investments (£1-5m) into high growth potential, established circular companies across W. Europe.



Smart meter technology for professional kitchens to measure and analyse food waste, to help improve margins.



Accelerator programme seeking to support 10 innovative circular economy startups in London. LWARB is anchor investor with the remaining funds raised through Seedrs.



Startup that is seeking to eliminate plastic packaging – they have created an edible water pouch out of a seaweed membrane.

Challenges

- Limited number of early stage investable opportunities – need greater research investment, ideation competitions and pre-accelerator support schemes;
- **However**, these are unlikely to generate a return on investment due to the high failure rate;
- Most private investors have low risk appetite, therefore falls to public sector to fill gap;
- **However**, LWARB and other public sector investors are expected to run a commercial model too but often don't have the same resources or skills as private firms;
- Brexit will have a big impact on early stage businesses – many founders or recruits are from Europe but evidence shows that numbers of overseas entrepreneurs going into accelerator programmes has fallen;
- Established SMEs much harder to reach and convince to adopt circular business models – typically have thin margins, little time or money to change;
- **However**, SMEs likely to face significant pressure to be more sustainable from companies at top of supply chain and challenged by new innovators below;
- Limited evidence base yet to prove that circular business models can drive strong investment returns;
- Circular Economy as a concept is not widely known by consumers or SMEs in the UK but we have seen some quality startups come through in the past 18 months;

How Can We Learn From Each Other?

- What level of public investment into SMEs is available in your region? What has worked well and what hasn't?
- What are the investment needs of SMEs in your region?
- What role has the private sector played to date in sustainable/ circular investing?
- How can we engage the private sector further?
- What other non-financial means of support are available for SMEs?
- How can SMEs in our respective regions learn from each other's experiences?
- What messaging and communication strategies have worked well in promoting the Circular Economy with businesses?