To Get Serious on the Circular Economy, Upend How Global Business Works

践行循环经济，革新全球商业运作方式

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Producing a laptop computer that weighs a few kilograms takes around one tonne of **raw** metal, plastic and **silicon**. Between 2000 and 2015, global clothing production doubled, but the number of times the average **garment** was worn before being **discarded** decreased by 36%. The body of a modern car contains more than a dozen steel and **aluminium alloys**, putting up huge barriers to recycling it.

生产一台几公斤重的笔记本电脑需要大约一吨的金属原料、塑料和硅。2000 年到 2015 年间，全球服装产量翻了一番，但一件衣服被丢弃前的平均穿着次数下降了 36%。一辆现代汽车的车身包含十几种钢和铝合金，给回收造成了巨大的障碍。

<u>These are just three of many **stark** statistics that **illustrate** the wastefulness of our current 'linear' economic model, which is based on extracting virgin resources, processing them, consuming them and dumping them when they are no longer useful.</u> This unsustainable approach is bad for the climate, for nature and for human health — and ultimately hits us in the wallet. One estimate by the global consultancy Accenture in 2015 suggested that US$4.5 trillion of extra value could be **unlocked** by creating products using 'waste' as a resource.

这只是众多严峻的统计数字中的三个，它们说明了我们当前的"线性"经济模式的浪费，这种模式的基础是开发原始资源，加工，消耗，当它们没用时把它们丢弃。这种不可持续的做法对气候、自然和人类健康都不利，最终会让我们的经济受损。全球咨询公司埃森哲 2015 年的一项估算显示，利用"废物"作为资源开发产品可以创造 4.5 万亿美元的额外价值。

That is the grand vision of a 'circular economy', in which

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raw [rɔː] *adj.* 未经加工的；生的；未经处理的 | The cost of our raw materials has risen significantly. 我们的原材料价格涨了很多。

silicon [ˈsɪlɪkən] *n.* 硅

garment [ˈɡɑːrmənt] *n.* （一件）衣服（尤用于谈及服装的制作和销售时）

discard [dɪsˈkɑːrd] *v.* 丢弃，抛弃 | Read the manufacturer's guidelines before discarding the box. 在丢掉盒子前先看一下制造商的使用说明。

aluminium alloy 铝合金

stark [stɑːrk] *adj.* 严峻的，令人不快的；光秃秃的，荒凉的 | We are faced with a stark choice. 我们面临残酷的选择。

illustrate [ˈɪləstreɪt] *v.* 说明，解释；加插图 | Let me give an example to illustrate the point. 让我举个例子来说明这一点。

linear [ˈlɪniər] *adj.* （过程或发展）线性的；直线的 | Students' reading does not always progress in a linear fashion. 学生阅读水平并非始终都是呈直线形提高的。

unlock [ˌʌnˈlɑːk] *v.* 释放（潜能），揭开（秘密）；开锁 | The divers hoped to unlock some of the secrets

materials are recirculated and maintain the highest value possible, and as much waste as possible is **eliminated**. Yet practical **implementations** of circular principles so far amount to **tinkering** at the edges. Some serious thinking is needed about what must happen to make circularity a universal guiding principle. The answer is: a lot.

这就是"循环经济"的宏伟愿景，在这种经济模式下，材料得以再循环，并保持尽可能高的价值，同时尽可能多地避免浪费。然而，到目前为止，循环原则的实际实施还只是在边缘小修小补。我们需要认真思考，怎样才能使循环成为普遍的指导原则。答案是：要做的有很多。

Some places are **ahead of the game**. China has been adopting circular-economy policies since the late 2000s. Its latest **iteration** of a circular-economy action plan, **valid** until 2025, sets ambitious targets for using **scrap** steel and construction waste, among other **refuse**. Its ban on importing plastic and other waste, implemented in 2018, has forced countries to rethink their own waste strategies.

有些地方走在了前面。自 2000 年代末以来，中国一直在采取循环经济政策。其最新的循环经济行动计划（有效期至 2025 年）为废钢、建筑垃圾和其他垃圾的利用设定了雄心勃勃的目标。中国于 2018 年实施了禁止进口塑料和其他废物的禁令，这使得各国重新考虑自己的废弃物策略。

The European Union announced a circular-economy action plan in 2020, and is looking towards implementing policies around substantiating sustainability claims by business, controlling packaging and **incentivizing** the use of recycled materials in manufacturing. Chile's road map for a circular economy by 2040 involves targets for waste reduction and the creation of more than 100,000 jobs.

欧盟在 2020 年宣布了一项循环经济行动计划，并正准备落实有关企业可持续发展的政策，控制包装并鼓励在制造业中使用回收材料。智利的 2040 年循环经济路线图目标包括减少废物和创造超过 10 万个就业岗位。

Such success stories must be learnt from, and governments

of the seabed. 潜水员希望揭开海底的一些秘密。

eliminate [ɪˈlɪmɪneɪt] *v.* 清除，消除；淘汰 | All the English teams were eliminated in the early stages of the competition. 所有英国队伍在比赛初期就被淘汰了。

implementation [ˌɪmplɪmənˈteɪʃn] *n.* 实施，执行，贯彻 | The full implementation of the system will take some time. 该制度的完全实施要花些时间。

tinker [ˈtɪŋkər] *v.*（尤指不起作用地）小修补，小修理 | It is not enough to tinker at the edges; our objective must be to reconstruct the entire system. 只在外缘做一些小修小补是不够的，我们的目标必须是重建整个系统。

ahead of the game 成功；领先，超越（竞争对手）

iteration [ˌɪtəˈreɪʃn] *n.* 迭代，新版本

valid [ˈvælɪd] *adj.* 有效的；符合逻辑的，合理的 | Your return ticket is valid for three months. 你的往返票有效期为三个月。

scrap [skræp] *n.* 废料，废品；碎片，小块 | The old equipment was sold for scrap. 这台旧设备作为废品卖出。

refuse [ˈrefjuːs] *n.* 废弃物，垃圾 | household refuse 生活垃圾

incentivize [ɪnˈsentɪvaɪz] *v.* 激励，奖励 | How should a company

across the world must implement legislation and regulations to incentivize investment in circularity. But there's more to it than that. Circularity requires a complete rethink of our **perception** of resources — and how we build our economic activities around them.

我们必须借鉴这些成功的案例，世界各国政府必须实施法律法规，激励对循环的投资。但需要做的远不止于此。循环要求我们颠覆对资源的看法，以及我们如何围绕资源开展经济活动。

Businesses need to be designed from the start (or redesigned) to be circular. The **inherent** value in resources needs to be recognized — for example, by **dismantling** and repurposing mobile phones or laptops for markets in which the latest models are not required. Price structures need to change to incentivize the production of items that can be usefully reused — so that resources retain their value through more than one cycle of use.

企业需要从一开始就设计（或重新设计）为循环模式。企业需要认识到资源的内在价值——例如，不去为市场制造新的型号，而是将移动电话或笔记本电脑进行拆解，并将其重新用于其他用途。价格结构需要改变，以激励那些可以有效再利用的产品的生产——这样资源才能在一个以上的使用周期中保持其价值。

Last but not least, basic science has a part to play. As the father of the circular-economy idea, Walter Stahel, wrote in Nature in 2016, "Excellence in **metallurgical** and chemical sciences is a **precondition** for a circular economy to succeed" . Ultimate recyclability lies in learning how to **disassemble** materials at the **atomic** level, **splitting up molecules** to recycle atoms. Funding agencies should be scanning the horizon for **promising** approaches, in areas from metal **alloys** to plastics.

最后但同样重要的是，基础科学也要发挥作用。作为循环经济理念之父，瓦尔特·施塔尔于 2016 年在《自然》杂志上写道："冶金和化学科学的发展是循环经济成功的先决条件。"根本的再循环能力在于学习如何在原

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incentivize its employees? 公司该如何来激励员工呢？

perception [pərˈsepʃn] *n.* 看法，见解；知觉，感知 | The public's perception of him is slowly changing. 公众对他的看法在慢慢改变。

inherent [ɪnˈhɪrənt] *adj.* 固有的，内在的 | Every business has its own inherent risks. 每笔生意本身都有风险。

dismantle [dɪsˈmæntl] *v.* 拆开，拆卸（机器或结构）；（逐渐）废除，取消 | I had to dismantle the engine in order to repair it. 我得把发动机拆开来修理。

metallurgical [ˌmetəˈlɜːrdʒɪkəl] *n.* 冶金的

precondition [ˌpriːkənˈdɪʃn] *n.* 先决条件，前提 | Economic growth is a precondition of human advance. 经济发展是人类进步的一个前提。

disassemble [ˌdɪsəˈsembl] *v.* 拆卸，拆开；散开，分散 | The concert ended and the crowd disassembled. 音乐会结束，人群便散去了。

atomic [əˈtɑːmɪk] *adj.* 原子的，与原子有关的

split up 把某物分成若干部分；分组；分手，离婚 | We were split up into groups to discuss the question. 我们分组讨论了那个问题。

molecule [ˈmɑːlɪkjuːl] *n.* 分子 | A molecule of water consists of two atoms of hydrogen and one atom of

子层面上分解材料，分裂分子来回收原子。资助机构应该在金属合金和塑料等领域寻找有前景的方法。

There's a lot to do to get the wheels of the circular economy truly turning. The movement has started — but it must accelerate.

要让循环经济的车轮真正转动起来，还有很多工作要做。这场运动已经开始——但必须加速。

oxygen. 水分子由两个氢原子和一个氧原子构成。

promising [ˈprɑːmɪsɪŋ] *adj.* 有希望的，有前途的，有出息的 | The weather doesn't look very promising. 天气看起来不会太好。

alloy [ˈælɔɪ] *n.* 合金 | Brass is an alloy of copper and zinc. 黄铜是铜锌合金。

➤ **脉络梳理**

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主句

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时间状语从句

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