

An abstract, high-contrast image featuring a dense, explosive cloud of fine particles in various shades of green and yellow. The particles are concentrated on the left side and spread out towards the right, set against a solid black background. The overall effect is one of dynamic energy and growth.

HIGH IMPACT PROCUREMENT

Supporting sustainable development



UNOPS would like to acknowledge the contributions of the various authors to this supplement to the 2016 Annual Statistical Report on United Nations Procurement. The views expressed in this publication are those of the authors and do not necessarily reflect those of the United Nations. Furthermore, the views expressed in this publication are not necessarily shared by each of the authors.

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HIGH IMPACT PROCUREMENT

Supporting sustainable development

Thematic Supplement to
the 2016 Annual Statistical Report
on United Nations Procurement



Foreword by UNOPS Executive Director

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Torgeir Haugaard

With the latest edition of the Thematic Supplement to the 2016 Annual Statistical Report, we look ahead to 2030.

When the world came together and adopted the 17 Sustainable Development Goals, it put into action a roadmap to achieving a better world by 2030. The world gathered behind a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

Procurement is a vital component to achieving these goals.

It connects goods and services to the people who need them most. It's an area where improved efficiency and innovation can have a long-term positive impact on development. And, it can open the doors of opportunity to traditionally disadvantaged groups – encouraging equality and stability.

This year's publication focuses on how procurement can have a high impact on sustainable development – and in achieving the Global Goals.

To achieve the Sustainable Development Goals, new thinking is essential. This applies to everyone, including UNOPS. So in the spirit of exploring new and innovative areas, we will close this series of publications, and instead follow the principle this final edition embraces: to now look towards new ideas, through which we can showcase how central procurement is to delivering on Agenda 2030.

I would like to thank all of the authors for their contributions to this publication and for sharing their ideas.

I hope that these articles will serve as inspiration for us all as we work together towards building a better world for all.

A handwritten signature in black ink that reads 'Grete Faremo'.

Grete Faremo
Executive Director, UNOPS

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Efficient public procurement is necessary for reducing poverty

By José Moscoso, UNOPS

The world's poorest and most vulnerable populations are the most dependent on public goods and services. They feel the brunt of waste and corruption in public procurement more than anyone else. Here's how we can contribute to making it better.

Public procurement has evolved from being merely a back office supply function to the public sector, to now being considered a key tool in economic policy – and arguably the most visible beacon of the quality of governance. Efficient public procurement also has a direct impact on poverty reduction. As such, efficient public procurement is vital for achieving Sustainable Development Goal (SDG) 1 of ending poverty. Sound public investment and spending is unquestionably an important factor in attaining the other 16 SDGs.

The first wave of procurement reforms, which started almost 20 years ago, focused on improving the regulatory framework and building skills. Later reforms combated corruption and waste by improving accountability, transparency, and better integrating public procurement across

government. But these reforms were slow to make a tangible difference. Why?

Previous procurement reforms often disrupted entire procurement systems – and daily work. Frequently, such reforms met with so much resistance that they were given up on or watered down. So how do you change not only the systems, but also the workflows, individual conduct, tools and, most importantly, minimize costs – all while managing the resistance to change inherent in nearly all public bureaucracies?

The answer is to initiate major changes through targeted reforms – surgically removing outdated, inefficient practices and recognizing proper existing practices to preventing disruption to the whole procurement system. The smart way of doing this is by building blocks of competence (which includes people, resources and workflows), targeting those areas where the biggest improvements are possible, with the largest combined impact. This requires a smart methodology to diagnose where you stand, before any changes are considered.

The world's most vulnerable populations depend on goods and services purchased by public entities. Making targeted reforms in public procurement processes can save money that could be re-invested into key areas.
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Changes that have the biggest impact

UNOPS considers procurement reform to be a dynamic, iterative process – testing and improving on what already exists – to help the quality and efficiency of procurement systems to leap forward.

At UNOPS, we've examined how we can help governments improve their procurement systems as well as show the concrete advantages to doing so. The UNOPS 'Procurement Efficiency Assessment Tool' (PEAT) helps minimize disruptions to day-to-day work and validates existing effective practices, through a forward-looking (instead of a retrospective audit-like) process that is carried out jointly with an organization's top and middle management.

This unique tool uses a set of questions, data and process reviews to help governments set the foundation for a targeted reform

by analyzing the strengths and weaknesses of their procurement systems. This tailored approach enables them to identify what needs to be changed without throwing out what works, minimizing the overall cost of the reform. This helps governments focus their efforts on those actions that will have the biggest potential impact, improving procurement efficiency and reducing costs.

Jalisco: An example of realizable savings

In 2016, UNOPS supported the Mexican State of Jalisco with promoting efficiency, transparency and sustainability in public procurement. The Jalisco project showed how UNOPS helped the state government to improve their public procurement processes, produce substantial savings – both in the short and long terms – prevent corruption, and increase accountability in the use of public funds.

UNOPS helped the government of Jalisco save 24% – which translated into \$13 million – on the purchase of new light rail wagons for public trains.

UNOPS also supported the establishment of long-term agreements for the *Instituto de la Infraestructura Fisica Educativa del Estado de Jalisco* for the procurement of educational supplies for 27,000 students. The government reduced administrative and logistics costs, as well as a received the best value-for-money.

In addition, UNOPS used the PEAT methodology with other public entities to develop recommendations on how to enhance competition, increase efficiency, and use currently available technologies to improve procurement planning and execution.

Seeing long-term gains, today

Often, the benefits of more efficient public procurement aren't immediate. And if the benefits will be reaped



after the current decision maker's administration is over, these reforms may be less likely to be given priority. Hence, we see a lot of patchwork attempts at improving the performance of public procurement systems, which – after failure or limited results – delay a serious and comprehensive reform programme.

Using PEAT methodology can concretely show a public manager how much money could be saved in the short, medium and long term, simply by making a few changes. These savings could then be re-invested into key areas identified by the tool to achieve sustainable improved performance.

A more efficient procurement system can also help governments save money and make sure they're buying the right things at the best prices, as well as attracting the best suppliers. Ultimately, this helps them buy more of the things that the world's poorest depend on ■

In Mexico, UNOPS helped the State of Jalisco promote efficiency, transparency and sustainability in public procurement. ©Getty Images/RonBailey



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The SDGs, human rights and procurement: An urgent need for policy coherence

By Olga Martin-Ortega, University of Greenwich
and Claire Methven O'Brien, Danish Institute for
Human Rights

Government purchasing comprises a significant share of the global economy. Worldwide, it accounts for €1 trillion per year, while across Organisation for Economic Co-operation and Development (OECD) countries, it comprises an average 12 percent of gross domestic product (GDP).¹ As 'mega-consumers,' governments hence have the power to shift markets towards sustainable production.

For decades, governments have sought to use procurement to advance

public policy goals, for example, by integrating disadvantaged groups into the labour market. Yet previously little consideration was given to public bodies' impacts on human rights via purchasing. A number of recent developments have, however, brought such impacts into focus.

On the one hand, the involvement of public institutions in supply chain abuses now attract increasing civil society, media and public attention. From surgical instruments and personnel uniforms, to mega-

infrastructure, the failure of public authorities to avert human rights abuses by suppliers or their subcontractors is being regularly highlighted.

On the other hand, new standards have signalled the human rights consequences of public buying. Foremost are the UN Guiding Principles on Business and Human Rights (UNGPs), endorsed by the UN Human Rights Council in 2011.² The UNGPs clarify that governments have a duty to protect human rights that extends





Sustainable Development Goal 8 aims to eliminate all forms of child labour by 2025. Achieving this requires leveraging public spending to drive respect for human rights in the private sector. ©Ananta Chowdhury

to procurement. At the same time, the UNGPs underscore that all businesses, including supplying governments, have a responsibility to respect human rights. This responsibility requires that they monitor and manage human rights risks along their supply chains.

The OECD,³ European Union (EU),⁴ international financial institutions, investors and many global companies have committed to upholding the UNGPs. The International Organization for Standardization's new 20400 Sustainable Procurement standard

aims to align with them. In addition, the International Labour Conference⁵ and the Group of 7 (G7)⁶ now emphasize the need for responsible global value chains as drivers of decent work, as well as sustainable and inclusive growth.

Adopted in 2015, the Sustainable Development Goals (SDGs) reinforced the role and significance of public purchasing in securing a global transition to sustainable consumption and production. In particular, SDG 12 calls on all countries to promote

sustainable public procurement practices and to implement sustainable public procurement policies and action plans.⁷

But governments have failed to recognize, or take adequate steps to address, the human rights dimension of sustainability in public buying. As indicated above, this is despite the fact that human rights abuses are endemic in the production of goods (for instance, electronics, foodstuffs and apparel), as well as the delivery of services, from construction to cleaning,

that are routinely purchased by public bodies.⁸

There is evidence that procurement laws and practices currently do as much to undermine business respect for human rights as to promote it. Legal rules requiring buyers to select the cheapest – or best value – bid may have a chilling effect on public sustainability initiatives. Buying officers fear that tenders that include human rights-related conditions in selection or award criteria will be contested as discriminatory.

It can also be questioned to what extent it is permitted to link the award of public contracts to bidding companies' efforts to implement corporate human rights due diligence as required by the UNGPs. Equally, it is unclear how governments can leverage procurement to reward corporate efforts on supply chain transparency or non-financial reporting, as now envisaged by legislation in many countries. Even where public buyers benefit from a permissive legal and policy environment, the vast majority appear to lack the awareness, tools and resources needed to effectively exploit this.

Once human rights are acknowledged as a dimension of sustainable procurement, it becomes clear that this situation obstructs the achievement of SDG 12. SDG 8 aims to eradicate forced labour, slavery and trafficking, to eliminate the worst forms of child labour and to ensure decent work for all. Given the heavy footprint of public purchasers across global markets, a continued failure to leverage public spending to drive respect for human rights in the private sector will also exact high costs there.

If in the past sustainable procurement efforts often focused on green considerations, it is imperative that public buyers now adopt a joined-up approach, by integrating business respect for human rights as a fully-fledged sustainability criterion when implementing SDG 12.

In this regard, efforts by first-mover public buyers can provide inspiration. Sweden's county councils spend €13 billion per year via collective procurement. Since 2010, they have used a common code of conduct for suppliers, followed up on by supplier questionnaires and targeted factory audits. A 2015 study found these measures significantly reduced serious labour rights abuses in workshops in Pakistan supplying the councils with surgical instruments, while workers in neighbouring facilities did not experience similar improvements.⁹

New rules have also been introduced in Norway that obliges public authorities to include clauses on wages and decent working conditions when purchasing construction, facility management and cleaning services. Buyers must follow up on the performance of such clauses, for instance by requiring supplier self-declarations.¹⁰

In the United Kingdom, universities are required to report under the Modern Slavery Act (2015) on their efforts to identify, prevent and mitigate modern slavery, human trafficking and forced labour in their supply chains.¹¹

An EU-wide collaboration of public bodies, Electronics Watch, seeks to address human rights abuses in government ICT supply chains.¹² Participating buyers receive template

contract clauses including a Code of Labour Practices. These encourage suppliers to disclose factory locations so that labour conditions can be monitored.

Urgent action by governments and other stakeholders is needed to speed up and scale up such innovations, to remove residual legal and policy barriers to integrating human rights into public purchasing. Only by achieving respect for human rights – and policy coherence – in public purchasing will the SDGs be realized ■

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¹ OECD, 'Public Procurement,' <http://www.oecd.org/gov/ethics/public-procurement.htm>.

² 'United Nations Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework,' U.N. Doc. A/HRC/17/31, (June 2011) [hereinafter UNGPs]: http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf and 'Protect, Respect and Remedy: A Framework for Business and Human Rights,' UN Doc A/HRC/8/5, (April 2008): <https://business-humanrights.org/sites/default/files/reports-and-materials/Ruggie-report-7-Apr-2008.pdf>.

³ The OECD Guidelines were updated in 2011 to align with the UNGPs: 'OECD, Guidelines for Multinational Enterprises' (2011): <http://mneguidelines.oecd.org/text/>.

⁴ European Commission, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A Renewed EU Strategy 2011-14 for Corporate Social Responsibility,' COM (2011) 681 final (25 October 2011): <http://eur-lex.europa.eu/>

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⁵ International Labour Organization, 'Decent Work in Global Supply Chains,' Report prepared for 105th Session, International Labour Conference, 2016, p. 18: http://www.ilo.org/ilc/ILCSessions/105/reports/reports-to-the-conference/WCMS_468097/lang-en/index.htm.

⁶ The G7 Leaders' Declaration called for tools to support public procurers in meeting social and environmental commitments. 'G-7 Leaders' Declaration,' Schloss Elmau, Germany (June 8, 2015): <https://www.whitehouse.gov/the-press-office/2015/06/08/g-7-leaders-declaration>.

⁷ G.A. Res. 70/1, 'Transforming our world: the 2030 Agenda for Sustainable Development' (25 September 2015): http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1.

⁸ International Learning Lab on Public Procurement and Human Rights (C. Methven O'Brien et al.), 'Public Procurement and Human Rights: A Survey of Twenty Jurisdictions,' 2015 Danish Institute for Human Rights and International Corporate Accountability Roundtable: <http://www.hrprocurementlab.org/>

[blog/reports/public-procurement-and-human-rights-a-survey-of-twenty-jurisdictions/](http://www.blog/reports/public-procurement-and-human-rights-a-survey-of-twenty-jurisdictions/).

⁹ SwedWatch et al., 'Healthier procurement: Improvements for working conditions for surgical instruments manufacture in Pakistan (2015):' http://www.swedwatch.org/sites/default/files/healthier_procurement.pdf.

¹⁰ International Learning Lab on Public Procurement and Human Rights, supra note 8.

¹¹ O. Martin-Ortega (2016), 'Modern slavery and human rights in global supply chains: Roles and responsibilities of public buyers. Policy and practice insights for higher education institutions in the framework of their obligations under the UK Modern Slavery Act,' BHRE Research Series, Policy Paper No.2: <https://static1.squarespace.com/static/56e9723a40261dbb18ccd338/t/5857c23dcd0f68bab21a76b6/1487000267236/Modern+Slavery+and+Human+Rights+Risks+in+Global+Supply+Chains+Insights+for+HEIs+2016.pdf>.

¹² Electronics Watch: <http://electronicswatch.org/en>.



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Promoting sustainable public procurement through demand aggregation

By Gian Luigi Albano, Consip S.p.A

In 2015, world leaders gathered at the United Nations to reshape the Millennium Development Goals into a global vision for sustainable development. The resulting Sustainable Development Goals¹ provide the overarching development framework for the world. Public organizations are on the frontline to put that framework into action.

Using procurement for objectives beyond the mere acquisition of works/products/services is a quite recent intellectual achievement.

Thanks to a profound reformulation of public procurement regulations at a global level, promoted by forward-looking policymakers, and the emergence of a more qualified procurement workforce, as well as of specialized procurement organizations, we are in the historically most favourable conditions to use public procurement for social objectives.

In the remainder of this short paper, we shall emphasize how demand aggregation – be it among separate purchasing units belonging to a single public organization or among distinct

bodies at the central government level – would make the implementation of sustainability strategies more effective.

What is sustainable public procurement?

Sustainable public procurement (SPP) can be defined as a: “process whereby public organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life-cycle basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst significantly reducing negative impacts on the environment.”²

The fundamental ambition of SPP is to expand the scope of public procurement by including a potentially wider array of externalities, be they towards the environment or the welfare of stakeholders, who are not necessarily parties to the public contract. Some of those externalities cannot properly be taken into account without evaluating the life-cycle costs (LCC) of any acquisition, which includes the purchasing price, operating costs (for example, energy, spares and

Demand aggregation could be an important incentive for economic operators to pursue innovation focused on environmentally friendly products and processes.
©Getty Images/lovelyday12



maintenance) and end-of-life costs (for example, decommissioning and removal).

Stretching the time horizon for evaluating the financial dimension(s) of the value for money makes all financial components more visible and transparent, thus allowing buyers to trade-off, say, a higher purchasing cost today with a lower maintenance cost tomorrow. Expenditures at different stages of the life cycle are emphasized, allowing public buyers to better plan – whenever admissible by public accounting rules – budgetary predictions over several years. These potential advantages require, though, the ability to evaluate intrinsically more uncertain cost dimensions arising in the future.

The role of demand aggregation in promoting sustainable public procurement

Public procurement procedures are often carried out by those procuring entities that are also the final users of the to-be-purchased goods/services/works. While this model is fairly widespread, novel organizational forms have emerged during the last few decades, mainly consisting of a separation between the organization(s) in charge of preparing and running the tender and the organization(s) making use of the awarded contract(s).

For instance, several centralized procurement agencies are now active in many countries, and are entrusted with the (almost exclusive) mission to aggregate the needs of central and/or local government bodies by awarding often sizeable framework agreements on their behalf. Less visible, albeit not necessarily less effective, forms of

demand aggregation could take place within a single organization whenever a single operational centre acts on behalf of several procuring units.

In this last case, SPP becomes easier to implement when separate decision centres, managing different budget items, are merged into one single procurement unit. If capital expenditures (such as computers or vehicles) and current expenditures (such as electricity and fuel) are managed by different organizational units, the LCC approach may be hardly implemented, as the unit in charge of purchasing a computer would not internalize the electricity consumption, which affects another unit's budget. Linking these two budget items is quintessential to the application of the LCC approach.

Even when a single organization – such as a small municipality – adopts a centralized procurement structure, it is far from being clear that it will be able to approach and solve the trade-off between more expensive investments today, and lower operating costs and/or higher benefits for the environment tomorrow. This also requires setting the 'optimal' discount rate to weight and value future benefits from sustainable strategies. To carry out such tasks a specialized know-how is of paramount importance, which is not likely to be within the reach of small public agencies.

Moreover, it seems reasonable that a central purchasing agency would plan its procurement strategies over a longer time horizon, as it is less sensitive to the political cycle than any single public organization. This implies that the discount rate set by a central agency may result in a discount rate closer to one that is socially optimal.³

Indeed, especially when the political cycle tends to be short at the local level, public decision makers, including procuring organizations, tend to overestimate the impact of decisions in the very short term with respect to those generating their effects in a more distant future. As a result, the foundations themselves of the LCC risk being undermined.

When pursuing SPP strategies any small public buyer – such as a local municipality – reaps only a tiny fraction of the overall reduction of negative externalities (for example, carbon dioxide), so it is likely to be affected by a standard free-riding problem, that is, to underestimate the value it attaches to lower pollution. When demand of several public bodies is aggregated – for instance, by means of a central purchasing body – the overall value of lower externalities can be internalized by a single (framework) contract awarded on behalf of several final users. Demand aggregation may then become an effective tool to (almost) fully internalize social benefits.

Finally, demand aggregation could come into play as an important incentive for the economic operators to pursue innovation focused on environmental friendly products and processes. Most importantly, the 'pull' effect triggered by centralized agencies is likely to provide more clear and coherent signals to the supply market on the most profitable kinds of investments. On the other hand, low-value independent procurements carried out by a large number of small public organizations would run the risk of not generating the pull effect for making firms' investments viable, and, even worse, may send contradictory signals to the supply market as to the kind of the required investments ■

¹ You can see all 17 UN Sustainable Development Goals here: <https://sustainabledevelopment.un.org/sdgs>.

² Definition adopted by the Task Force on Sustainable Public Procurement led by Switzerland. Membership includes: Switzerland, United States, United Kingdom, Norway, the Philippines, Argentina, Ghana, Mexico, China, Czech Republic, State of Sao Paulo (Brazil), UN Environment, International Institute for Sustainable Development, International Labour Organization, European Commission (Directorate-General-Environment) and International Council for Local Environmental Initiatives. Adopted in the context of the Marrakech Process on Sustainable Production

and consumption led by UNEP and UN DESA: <http://www.unep.fr/scp/marrakech/taskforces/pdf/Procurement2.pdf>. The concept is very much linked to that of sustainable development, which requires the present generation to pursue its own needs without compromising the ability of future generations to meet their own needs.

³ Defining the socially optimal discount rate is not an easy task. A fair amount of literature exists dealing with the concept of social discount rates and their relations with global warming and climate change. See: P. Dasgupta, 'Discounting climate change,' *Journal of risk and uncertainty*, 2008, 37, pp. 141-169.



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Choosing the right colour condom: Green!

By Eric Dupont, UNFPA

The Sustainable Development Goals (SDGs) are ambitious, and they will require enormous efforts across countries, continents, industries and disciplines – but they are achievable. UNFPA, United Nations Population Fund is working with governments, partners and other UN agencies to directly tackle many of these goals – in particular SDG 3 (good health and well-being), SDG 4 (quality education) and SDG 5 (gender equality).

In 2016, for example, contraceptives supplied by UNFPA reached 20.9 million people, helping prevent an estimated 11.7 million unintended pregnancies, nearly 3.7 million unsafe abortions and an estimated 29,000 maternal deaths.

UNFPA is proud to have enabled millions of women to exercise their fundamental human right to decide, free of coercion, discrimination and violence, when or how often to have children – and to have helped to nearly double modern contraceptive use worldwide from 36 percent in 1970 to 64 percent in 2016.

UNFPA is also committed to contributing to the achievement of SDG 12 (responsible consumption and production). Since UNFPA launched its Green Procurement Strategy in 2013, one of the first objectives was to collaborate with its suppliers to reduce the environmental impact of the UNFPA supply chain.

In 2016, UNFPA procured more than 420 million male latex condoms that have efficiently protected people against sexually transmitted infections and HIV/AIDS. Yet despite the profound social benefits of the work of UNFPA, male condoms remained the least environmentally sustainable product due to the quantities of water, chemicals and raw material required for their production. Condoms also have a large environmental footprint due to the type and amount of resources used for packaging and shipping.

The high environmental impact of condoms, which are leverage products (high relative spend and low supply risk) for UNFPA, led the organization to explore the possibility of procuring a more sustainable product via a four-point strategy with measurable goals to reduce:

- Carbon dioxide emissions
- Water consumption
- Hazardous chemical impacts
- Raw material consumption

In implementing the strategy, UNFPA communicated with donors, governments and beneficiaries, and engaged suppliers on a collaborative basis, focusing on long-term benefits and clearly communicating the what, why and when of the plan.

Suppliers were asked to define an action plan in their tenders in

response to the long- and short-term environmental goals of UNFPA. UNFPA then monitored the implementation of suppliers' action plans and suggested improvements.

Following the implementation of the UNFPA Green Procurement Strategy, all long-term agreement suppliers of male latex condoms are now ISO 14000 certified.¹ As a result, UNFPA has seen a reduction in the environmental impact of these products, including monthly savings of:

- 7.8 metric tonnes of carbon dioxide
- 11.8 million kilograms of solid waste
- 587,598 cubic metres of water used
- 995,397 cubic metres of water treated
- 1,301,554 kilowatt hours of electricity

The success of this initiative has demonstrated that market-shaping activities are not only limited to bringing prices down. Other important considerations can be taken into account. UNFPA continues to monitor the results regularly ■

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¹ ISO 14000 certifications refers to environmental management

High quality condoms are particularly important for guarding against unintended pregnancies and life-threatening sexually transmitted infections. ©UNFPA



Eric Dupont joined the United Nations in January 1993 and has been the Chief of the UNFPA Procurement Services Branch since

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Enabling carbon reduction through health procurement

By Jerome Baddley, Simon Briggs and Eleni Pasdeki-Clewer, the Sustainable Development Unit for the National Health Service, public health and social care system

The United Kingdom's (UK) Climate Change Act (2008)¹ forms the backbone of the Government's plan to reduce current and future carbon emissions. The Act was the first national legislation worldwide to set targets and create policy instruments to support carbon reduction. The aim is to reduce greenhouse gas (GHG) emissions by at least 80 percent by 2050 (against a 1990 baseline).

The UK's carbon footprint peaked at nearly 1.3 million tonnes of carbon dioxide equivalents (CO₂e) in 2007. In 2013, it was 19 percent lower than this.² While every sector is expected to play their part, the public sector is looked upon to take a leading role. This is not only in terms of managing its own operations, but also in its wider reach. With a population of over 65 million,³ nearly 5.5 million⁴ of whom are public sector workers,⁵ the public sector's direct influencing potential, and its associated ripple effect, is quite significant.

Why health procurement matters

Over 1.8 million people in the UK are

employed by the National Health Service (NHS) or other public sector health and social care⁶ organizations – more if we include private and third sector⁷ staff that deliver NHS services. The health and social care system is a significant consumer of goods and services. It also faces increasing financial pressures due to population growth, increasing life expectancy and efficiency targets.

The global impacts of GHG emissions are shared by all of us. Recent analysis into the effects of travel on the local environment and corresponding health impacts further connected local travel decisions and people's health and health quality.⁸ Delivering high-quality healthcare is incompatible with unsustainable practices that may result in ill health.

Establishing the policy framework

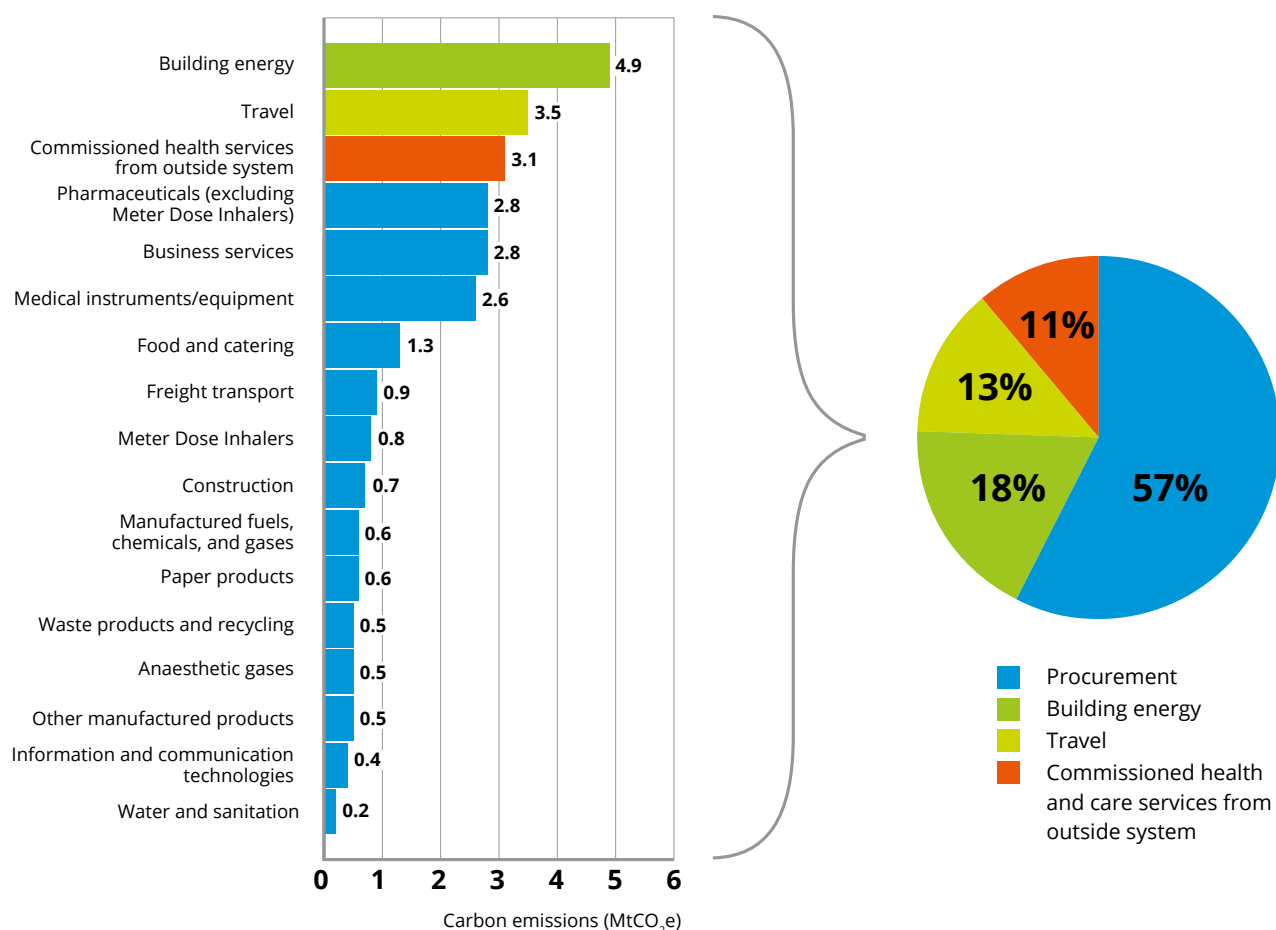
To manage these impacts in 2008, a publicly funded national unit – the Sustainable Development Unit (SDU) – was established to work on behalf of, and in support of, the health and social care system in England.⁹

In 2009, SDU published the NHS Carbon Reduction Strategy for England.¹⁰ This strategy articulated a commitment by the NHS to be a leading sustainable and low carbon organization, fully supporting the carbon reduction objectives set by the Climate Change Act. The strategy identified key areas for action, including procurement, with specific recommendations for improvement and anticipated corresponding carbon benefits. Bespoke tools and guidance were developed to support implementation. *Procuring for Carbon Reduction*¹¹ (P4CR) provided a tailored maturity matrix¹² to drive policy changes across organizations, as well as tools¹³ to prioritize expenditures based on carbon impacts and to track progress with implementation.¹⁴

Developing the evidence base

In 2012, the world's first combined health, public health and social care carbon footprint for a national health system was published. The analysis estimated the health and social care system carbon footprint to be 32 million tonnes¹⁵ of CO₂e. Breaking down that figure suggested that there

NHS, Public health and social care carbon footprint breakdown of procurement 2015



Breaking down the carbon footprint demonstrates four key areas to focus carbon reduction activity. Please note that the pie chart above does not add up to 100% due to rounding. ©Sustainable Development Unit

are three broad contributing areas: Carbon from energy consumed in buildings, emitted during travel and transport, and embedded within the goods and services sourced by the health and social care system.

The same research suggested that in 2012, 21 percent of the GHG emissions for the NHS in England were attributable to pharmaceuticals and 11 percent to medical devices. In parallel with the drive to reduce the impacts of procurement decisions, SDU began multilateral dialogue with the pharmaceutical and medical devices industry.¹⁶

In 2012, through the Coalition for Sustainable Pharmaceuticals and Medical Devices,¹⁷ internationally recognized guidance for identifying and reducing the impacts of pharmaceutical products and medical devices was published.¹⁸ In 2014, a report into high GHG intensity prescription items¹⁹ for the NHS in England was made available. Twenty items were identified as most significant in terms of their GHG contribution to the health and social care system's overall carbon footprint.

In January 2017, SDU published a study into prioritization of high GHG

intensity items procured by the NHS in England.²⁰ Using a bottom-up approach, and more specifically, GHG material intensity factors (kilogram CO₂e per kilogram of material) from the 'ecoinvent'²¹ database, a list²² of high priority products was developed. The list can help the health and social care system target specific areas in the procurement process.

Implementing and measuring impact

Our approach to embedding sustainable development principles

within the health and social care system consists of four parts:

- Planning: having board-approved Sustainable Development Management Plans, which include commitments on procurement
- Measuring and reporting progress with implementation through an annual Sustainability Report (that includes procurement)
- Evaluating commitment to sustainable development (including procurement) through the Good Corporate Citizenship tool²³
- Engaging staff, service users, communities and the wider public²⁴

This combination of policy instruments and implementation tools for procurement professionals, together with industry engagement, has enabled the health and social care system to progress on the right path to reduce its carbon impacts.

In June 2016, a report was published on the financial benefits of sustainable development as realized by health

organizations.²⁵ A progress report – Health Check²⁶ – of the health and social care system was also launched in 2017.

Emerging next steps

Product and service level carbon footprinting is a helpful but resource-intensive process. While input-output analysis is a useful approach for a system-wide, bird's-eye view of GHG emissions, we are beginning to explore less intensive product and service-specific methodologies that can help refine results and inform decision making. An example is material-based factors that move away from cost-dependent calculations and establish a causal relationship between types and weights of primary materials and carbon emissions.

Equally, irrespective of the undeniably critical role of GHG emissions reduction, there are more dimensions to sustainable procurement. Water, waste and the use of non-renewable materials are part of the wider

resource efficiency picture and currently under active consideration. Significant work on the social impacts of health procurement has also taken place. The recently refreshed 'Ethical Procurement for Health'²⁷ provides policy materials and supporting tools to facilitate the inclusion of ethical and labour standards in procurement.

Sustainability has often seemed to be the preserve of estates and facilities teams, who can show quick, cashable savings. However, the most significant impacts and rewards are often through influencing procurement decisions and supply chains. Providing the tools for the job that are properly calibrated for the task – and the right support for practitioners – is essential to progress with embedding sustainability in procurement. SDU will continue to work with the health and social care system to deliver sustainable health ■

¹ <https://www.theccc.org.uk/tackling-climate-change/the-climate-change-act/>.

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/542558/Consumption_emissions_May16_Final.pdf.

³ <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/overviewoftheukpopulation/mar2017>.

⁴ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/bulletins/publicsectoremployment/mar2017>.

⁵ <https://www.ons.gov.uk/employmentandlabourmarket/people>

[inwork/publicsectorpersonnel](#).

⁶ <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/publicsectorpersonnel/bulletins/publicsectoremployment/mar2017>.

⁷ <https://www.nao.org.uk/successful-commissioning/introduction/what-are-civil-society-organisations-and-their-benefits-for-commissioners/>.

⁸ <http://www.sduhealth.org.uk/delivery/measure/health-outcomes-travel-tool.aspx>.

⁹ <http://www.sduhealth.org.uk/about-us/who-we-are.aspx>.

¹⁰ http://www.sduhealth.org.uk/documents/publications/1237308334_qylG_saving_carbon_

[improving_health_nhs_carbon_reducti.pdf](#).

¹¹ http://www.sduhealth.org.uk/documents/resources/P4CR_workbook_rV2_SW.pdf.

¹² http://www.sduhealth.org.uk/documents/resources/P4CR_workbook_rV2_SW.pdf.

¹³ http://www.sduhealth.org.uk/documents/resources/P4CR_SCO2PE_Prioritisation_Tool_V3.xlsx.

¹⁴ http://www.sduhealth.org.uk/documents/resources/P4CR_self_assessment_tool.xls.

¹⁵ http://www.sduhealth.org.uk/documents/publications/2014%20strategy%20and%20modulesNewFolder/MODULE_carbon_hotspots_FINAL.pdf.

¹⁶ <http://www.sduhealth.org.uk/areas-of-focus/>



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[carbon-hotspots/pharmaceuticals.aspx](#).

¹⁷ Now the Coalition for Sustainable Healthcare.

¹⁸ http://www.sduhealth.org.uk/documents/publications/2015/Pharma_Full_Guidance_GHG_Nov_2012.pdf.

¹⁹ http://www.sduhealth.org.uk/documents/publications/2014/GHG_Prescription_Feb_2014.pdf.

²⁰ http://www.sduhealth.org.uk/documents/publications/2017/Identifying_High_Greenhouse_Gas_Intensity_Procured_Items_for_the_NHS_in_England_FINAL.pdf.

²¹ http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&sqi=2&ved=0ahUKWjHy-_i9d7UAh

[WPZ1AKHVvnACIQFggkMAA&url=http%3A%2F%2Fwww.ecoinvent.org%2Fdatabase%2Fdatabase.html&usg=AFQjCNGwFrEVc7GtaYV0e0oQI365BB1vug](#).

²² http://www.sduhealth.org.uk/documents/publications/2014/GHG_Prescription_Feb_2014.pdf.

²³ <http://www.sduhealth.org.uk/delivery/evaluate.aspx>.

²⁴ <http://www.sduhealth.org.uk/delivery/plan.aspx>.

²⁵ http://www.sduhealth.org.uk/documents/publications/2016/Securing_Healthy_Returns_Report_SDU_WEB.pdf.

²⁶ <http://www.sduhealth.org.uk/documents/>

[publications/2017/SDU_health_check_2017_WEB.pdf](#).

²⁷ <http://www.sduhealth.org.uk/areas-of-focus/commissioning-and-procurement/procurement/ethical-procurement-for-health-workbook.aspx>.

Five rules for powerful partnerships

By Jeanne Kling and Kate Vitasek,
University of Tennessee



UN Sustainable Development Goal 6 (SDG 6) aims to ensure available and sustainable management of water and sanitation for all.

If money were the answer, the problem would already be solved.¹ “Twenty years ago, we identified one billion people without access to water,” reports the director of an international water supply consulting group. Since then, billions of dollars have been poured into the problem (on average

\$3.4 billion annually) – and still about the same number of people remain without water.² Countries are not getting ahead of population growth.

Many non-governmental organizations (NGOs) and organizations tackle the global water/sanitation crisis using faulty approaches. “The paradigm that simply installs water systems as gifts and assumes beneficiaries will have water for the foreseeable future does not work,” shares the CEO of a

global water non-profit that is using a different approach to address the challenge. The non-profit, herein referred to as NGO H2O,³ was the subject of University of Tennessee research on how to form highly successful partnerships.

H2O is interesting not just because of their impact model, which aligns with SDG 6, but because of how they work to achieve their mission. The key to their success? Create true win-



| Globally, more than 800 million people lack basic drinking water service. Source: World Health Organization ©UNOPS/Atsushi Shibuya

win collaborative agreements with partners who literally have a vested interest in achieving the same goal. The following is an overview of five key rules that H2O followed in building and maintaining some of those relationships.

Rule #1: Focus on outcomes, not transactions

There are many organizations focused on providing people access to potable

water. Many raise donations and install wells in local communities with volunteers from the Global North. But, when volunteers leave, water systems can break, sometimes from lack of knowledge about long-term maintenance, or due to difficulty in locating spare parts or raising funds to maintain the water systems.

H2O doesn't focus on short-term goals (for example, installing a pump) and quick wins. Rather they focus on long-

term, sustainable outcomes. This is achieved by changing the systems in which the services are provided – using adaptable models, building evidence, collaborating with partners, working with governments and being humble.

H2O's CEO noted that success wasn't just about building infrastructure – it was also about building the institutions, businesses and service authorities needed to keep the systems running.

Rule #2: Focus on the what, not the how

This rule means stakeholders in the solution have input on how to implement the solution. While H2O and its partners agree on the what (investing in solutions that provide sustainable services forever), the how is up for interpretation. Local communities decide the details regarding the water and sanitation solutions they will use and how to ensure sustainability.

And sustainability can be found in unique ways. By providing local community activists with training, a bicycle and tools to repair and maintain local water infrastructure, the organization has seen ripple effects worth noting. In India, one such activist went on to organize a team of mobile mechanics that keeps water points running, supporting the development of local businesses. This has also increased the lifespan and decreased the downtime of each water point.

Rule #3: Clearly defined and measurable desired outcomes

This rule means implementing a strong performance management process to measure success against goals. For several years, H2O has led efforts to transparently monitor and provide reporting systems, including through the use of mobile platforms to collect data. Using surveys, pictures and videos on devices with GPS, staff and trained water and sanitation professionals from the districts can upload real-time (or close to real-time, depending on connectivity) information to Google Earth and internet-based databases.

Does measuring for the long term work? Yes. Evidence collected through these platforms has confirmed great progress in water service levels across all districts – almost doubling in just four years.

Rule #4: Pricing model with incentives

The secret to an effective partnership is in how donations are used in pursuit of stated goals. University of Tennessee researchers studying H2O found three keys to success.

First is long-term thinking: Ensuring solutions remain operational and self-sustaining long after a project is finished. It also means developing solutions that can easily be replicated by other NGOs or national governments to scale water and sanitation services across entire countries. H2O is actively working with national governments in Africa and Latin America to develop national investment plans, frameworks and systems to meet SDG 6.

Shared risk and shared reward creates a sense of accountability. Insisting on this ensures that all partners literally have a vested interest in the success of the goal. Communities and governments contribute funds, labour and talent, in partnership with the NGO.

The third ingredient is the focus on a flexible economic model. This allows local districts to create solutions that evolve as needs change. Over time, the goal is to shift economics so local communities become self-funded and aid-independent. To find the right model, it is important to work with communities to set appropriate rates for water systems that are affordable

for users, but high enough to cover the cost of maintenance and eventual replacement. H2O develops supply chains for spare parts and trains local water and sanitation professionals. This is a double win – ensuring sustainability of systems while also providing local job opportunities.

Rule #5: Insight versus oversight governance structure

Whether it's Washington, D.C., The Hague or a remote village, politics holds a mighty grip. Senior management should have autonomy to make decisions and try innovations that work best in their countries, provided they align with the vision of the organization for which they work. In the case of H2O, country directors have flexibility on the types of procurement and partnership agreements, as long as they follow internal policies. Whatever the form, the agreements almost always follow the Five Rules above. ■

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Kate Vitasek (lead author) is one of the world's authorities on highly collaborative win-win relationships for her award-winning

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¹ Video, Back to the River, Editors Roger Dacier and Wesley Thomas, Producer Lisa Newman, Executive Producer Tessa Livingstone, a Small Media Large production, 2010.

² *Vested: How P&G, McDonald's, and Microsoft are Redefining Winning in Business Relationships*, Kate Vitasek, Karl Manrodt, Jeanne Kling; Palgrave MacMillan; New York, New York; 2012, Page 156.

³ H2O is a fictional name. The real identity of the NGO has been protected to ensure the objectivity and neutrality of the publication.

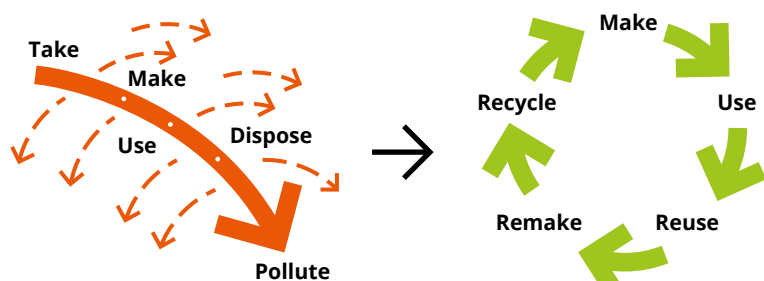
Rethinking procurement for a circular economy

By Catherine Weetman, Re-think Solutions

The circular economy opens up value opportunities in every sector, worldwide. Circular approaches reduce risk while increasing agility and flexibility. Business and society become resilient, sustainable and fit for the future. Procurement teams can lead the way, both internally and through suppliers.

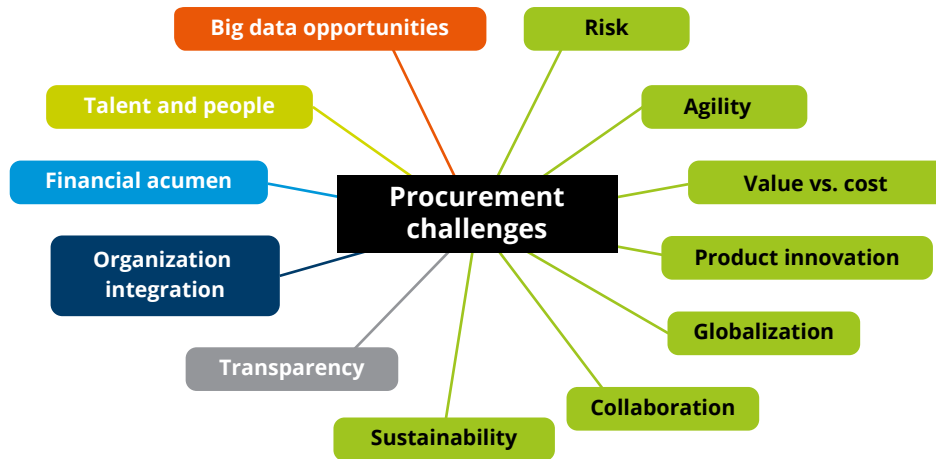
Most industrial processes take some materials, make something, sell it and at end-of-use, throw it away; this is a linear economy. Resources embedded along the process – such as energy, labour, water and materials – are also wasted. Our increasing pressure on earth systems is pushing them beyond safe limits. Increasing pressure on society is creating hardships, unrest and conflict, and demand is outstripping supply. How can we redesign the negative feedback loop of destruction and depletion of resources and living systems, so that we can regenerate what we need, to have enough, for all and forever?

From leaky to loopy



Transforming linear processes to a circular economy.
©Catherine Weetman

Typical challenges for procurement teams



The circular economy can support the challenges highlighted in the green boxes below. ©Catherine Weetman

Opportunities and challenges

Globalization has increased choices and reduced costs, but involves extended supply chain tiers, which obscures the risks and challenges at each stage. Three billion new consumers are set to join the global market between 2010 and 2030 – a fantastic business opportunity, but with complex challenges. How do we meet all our needs in a world of finite resources, land and water?

A useful open-source tool is the Future Fit Business Benchmark,¹ based on Natural Step system conditions aiming to: cycle finite materials; use safe, renewable or recycled materials; regenerate living systems to secure abundant natural resources and ecosystems; and create meaningful jobs and support local communities.

The circular economy supports these criteria. It is an intelligently designed, whole system approach, replacing

consumption with use, with business models that recover products and materials.

Aiming for a 100 percent yield from each resource, it creates more from less and converts waste to inputs. Take, for example, the process of making orange juice. Bio-refining creates valuable by-products. Pectin, pulp and zest can be used in food manufacturing. Orange essential oils are valuable for pharmaceuticals and cosmetics. Citrus peels can create a silk-like textile for fashion garments.

Inputs are more sustainable as they can be renewable or recycled from supply chain waste or other end-of-life products. Circular products last longer, are used more intensively and reused, with efficient disassembly and separation of each material for recovery. The tightest loops create the most value: reuse, reselling, and then repair and remanufacture – while recycling remains the last choice.

The circular economy decouples products and services from resource consumption, going much further than resource efficiency and recycling. It reduces externalities, including pollution and deforestation, and transfers jobs from extraction and mass production to service, repair, remaking and resource recovery.

How does the circular economy support the Sustainable Development Goals (SDGs)?

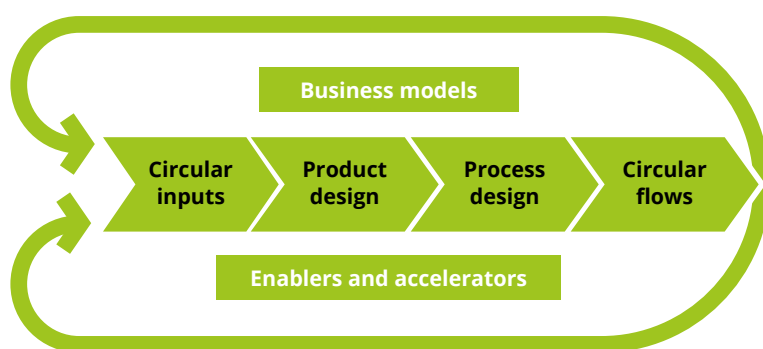
There are many ways that the circular economy can support the SDGs:

- Cycling finite materials and using sustainable renewable materials, including water and renewable energy, helps both people and planet
- Local flows and business models designed to encourage durability, repair-ability and reuse all help reduce waste and improve productivity

- Resource efficiency, recovery of process inputs and converting waste into new inputs and by-products reduces cost, creating new revenue streams and employment
- Remanufacturing and repair creates markets for more affordable, high-quality products and equipment

The framework below² highlights key intervention points along the value chain.

Circular economy framework



The value chain: circular economy intervention points.
©Catherine Weetman

Circular inputs materials should be safe and have secure supplies: either recycled or renewable. Exciting innovations use abundant, natural materials, such as algae for fibres and leather from fish skin. For example, a company grows mycelium from waste straw to use in packaging, home and construction materials. Another company collects and sorts textile waste from all over the world, creating high quality yarns for a wide range of apparel, home, and industrial products that can be recycled into new yarn, for a closed loop solution.

Product designs use less, are durable and can be reused. For example, modular houses can create jobs where they are needed, and smart ideas enable rapid construction above existing car parks. Manufacturing is more efficient than site construction, with higher production standards and reduced waste. A start-up mobile phone business is improving the end-to-end lifespan of mobile

phones, including use, reuse and safe recycling. The smartphone has a modular, durable and rugged design – and should it need repairing, you can simply order the parts online and swap them out with a screwdriver. The organization is building a fair-trade supply chain, sourcing materials that support local communities, and sourcing conflict-free minerals.

Process design aims to use less, use renewables and convert waste into resources. You can now procure solvents as a service, reusing your recovered resources and by-products, or selling them to others. Bio-refining is developing, extracting valuable nutrients and chemicals from waste streams.

Circular flows include reuse, remanufacture or recycling – improving the economics and effectiveness of recovery. A new design of textile thread dissolves when subjected to low-level microwaves, enabling easy separation of textiles, buttons, zips for recycling and reuse. Other electronics' circular projects include post-consumer recycled plastics in personal computers and packaging made from waste wheat straw. Remanufactured products can be high quality, durable and come with the same warranty as new versions, but cost less. For major engineering and industrial equipment producers in America and China, it is an extremely profitable part of their business, and now Europe is seeing its potential. Reuse and sharing platforms are gaining traction, enabling exchange of resources within and between organizations.

Business models for 'servitization',³ collaborative consumption and performance contracts are evolving, with established examples including photocopiers, tyres-by-the-mile and aircraft engines. Airlines buy power by the hour and both parties share objectives for efficient performance and no breakdowns!

Procurement opportunities

How can the circular economy help with those procurement challenges? Consider the following questions:

- Are your suppliers facing risks, such as water scarcity, soil degradation and climate disruption? Could they swap something toxic, scarce or expensive for recycled or renewable resources? Can you support smaller suppliers with tools and training, help them diversify with new by-products and co-products, and become more resilient? Could precision farming or other regenerative practices help them – and help secure your long-term supplies?
- How can you develop relationships and shared value opportunities with your suppliers? Can you re-specify materials or equipment to improve agility, perhaps by creating the flexibility to use virgin or recycled materials?
- Could you create new value (and build reputation) through more

sustainable sources, longer term win-win supplier partnerships, or by generating revenue from waste?

- How can you work with suppliers – and across your business – to drive product and service innovation, and develop future-fit solutions?
- Circulating products, components and materials supports local flows, reducing reliance on those opaque global sources.
- Could you collaborate with suppliers or exchange by-products with local organizations?
- Circular, sustainable approaches fulfil the Future-Fit system conditions, transforming business, supporting the SDGs and creating enough, for all, forever.

Getting started

Wherever you are on the sustainability journey, there are opportunities for procurement.

Risk assessing key services and materials in back office categories could produce some quick wins and

get buy-in from other stakeholders. Subsequent phases might include packaging, new products or services, then core business items.

Could you encourage suppliers to develop circular approaches, creating a win-win solution? Are they supplying something problematic, perhaps non-recyclable packaging? Could you negotiate a discount for returning end-of-use items when purchasing replacements?

Future-fit: Enough, for all, forever

The circular economy – using and sharing safe, secure and renewable materials, instead of consuming resources – is gaining traction with business leaders, governments and cities. Procurement teams can lead the way by taking a systems perspective, and working with a wider group of stakeholders, to create new value opportunities, all along the supply chain ■

¹ Future Fit Business Benchmark: <http://futurefitbusiness.org/>.

² Weetman C (2016), *A Circular Economy Handbook for Business and Supply Chains: Repair, Remake, Redesign, Rethink*, Kogan Page, ISBN 978-0-7494-7675-5.

³ http://reports.weforum.org/toward-the-circular-economy-accelerating-the-scale-up-across-global-supply-chains/favourable-alignment-of-enablers/?doing_wp_cron=1501083615.0163989067077636718750.



Catherine Weetman

helps develop future-fit, resilient strategies, examining sustainability risks and value

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Promoting the participation of micro- and small enterprises in procurement

By Danielle Carvalho Ribeiro, Minas Gerais State Government



Supporting the participation of micro- and small enterprises in public procurement processes can help promote inclusive and sustained economic growth. ©Getty Images/filipefrazao

In view of the 17 Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development, this case study highlights the experience of the Minas Gerais State Government in promoting the participation of micro- and small enterprises in public procurement.

In Brazil, the money spent by governments in procurement processes represents, on average, 15 percent to 20 percent of the country's gross domestic product (GDP) and mobilizes important sectors of the economy.

In this scenario, supporting the participation of micro- and small enterprises in these processes is strategic. Micro- and small enterprises are great influencers of Brazilian social and economic development. They represent most of the country's formal business sector and generate more than 52 percent of formal employment opportunities.

Prioritization through legislation

In 2006, through Complementary Law 123, Brazil established the

National Statute of Micro- and Small Enterprises. Among other provisions, this statute regulated the participation of micro- and small enterprises in public contracting. Since then, Brazilian states and municipalities have been granted the ability to differentiate and simplify the treatment of micro- and small enterprises in their procurement processes.

In 2007, through State Decree 44.630, the Minas Gerais State Government created a new and simplified process for these enterprises. In 2011, State Decree 45.749 mandated that the



In many countries, micro- and small enterprises are a major source of private sector employment opportunities. ©Getty Images/shapecharge

acquisition of goods and services valued at less than or equal to 80,000 Brazilian real (approximately \$25,000), be reserved for micro- and small enterprises. From 2013, this rule became mandatory for public procurement processes carried out by the executive branch of the Government, and for those carried out by the legislative and judicial branches of Minas Gerais.

In 2014, the Government of Brazil's Complementary Law 147 further expanded the benefits to micro- and small enterprises throughout the national territory. These included:

- An extension of the period for micro- and small enterprises to demonstrate fiscal regularity from two to five business days. After being selected as a winning bidder, proving fiscal regularity is a condition of doing business with the government in Brazil.
- The mandatory reservation of contracts valued at or equal to \$25,000 for micro- and small enterprises. The Minas Gerais State Government, and some other state and municipal governments, had followed this rule since 2011. This change, however, made it

compulsory throughout Brazil from 2014 onwards.

- The possible reservation of contracts for micro- and small enterprises based in the same city or region as the contracting authority. Currently, state and municipal governments are allowed to prioritize micro- and small enterprises headquartered locally or regionally, providing that the price of their offers does not exceed 10 percent of the lowest priced, technically compliant offer. This condition requires that authorization has been included in the bidding notice and is duly justified. The application of this practice is based on the premise that investing additional resources in the same regions helps to drive economic and social sustainability.
- Shortly after its adoption, the Minas Gerais State Government altered and updated its own legislation to adapt and align with the innovations brought by the latter.

Results

According to data from Welson Kleiton Antônio De Souza and Leonardo Lacerda Bittencourt Maciel,¹ the number of micro- and small

enterprises registered in the General Suppliers Registry of Minas Gerais increased by approximately 40 percent between 2012 and 2015. In 2015, 22,339 enterprises of this kind were registered, accounting for almost 70 percent of all suppliers in the state database that year.

While changes in registration are important, according to Célio Cabral De Sousa Júnior,² full success requires that public procurers place greater emphasis on regional considerations when defining their public procurement criteria. For example, 78.5 percent of the total value of goods and services purchased by Minas Gerais in 2005 (i.e. more than \$186 million), came from suppliers located in the Metropolitan Region of Belo Horizonte (a micro-region of Minas Gerais). More work is needed to ensure that public procurement opportunities, and the economic and social benefits stemming from them, are equally distributed across regions.

In conclusion, the strategies adopted by Minas Gerais are helping Brazil to reach SDG 8, promoting sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all ■

¹ Welson Kleiton Antônio De Souza and Leonardo Lacerda Bittencourt Maciel. 'Fomento à participação de micro e pequenas empresas nas compras públicas: impactos da regulamentação da lei complementar,' n° 147/2014 em minas gerais. In: IX Congresso Consad de Gestão Pública, Brasília, 2016.

² Célio Cabral De Sousa Júnior. 'Utilização do poder de compra do estado de Minas Gerais como instrumento de desenvolvimento regional e para a promoção de políticas públicas locais redistributivas.' In: Anais do XIII Seminário sobre a Economia Mineira. Universidade Federal de Minas Gerais, 2008.



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Health sector public procurers as SDG pioneers

By Lorea Coronado-Garcia, Rosemary Kumwenda and Mirjana Milic, UNDP

While healthcare saves lives immediately, it can also harm the environment and threaten our ability to guarantee good health for future generations. That is one of the reasons sustainability is so important.

Public procurement, which traditionally connects the private and public sectors, is increasingly seen as a way to help advance the Sustainable Development Goals (SDGs). In 2012, recognizing the potential to accelerate development through procurement, UN agencies joined forces under the Sustainable Procurement in the Health Sector (SPHS)¹ initiative to use their \$5 billion in collective spending on healthcare related goods and services to review and change internal legislative and operational frameworks. The tools, guidance and network developed through these efforts focus on sustainable health (SDG 3), sustainable production and consumption (SDG 12), and mobilizing partners around the SDGs (SDG 17).

Health sector spending is an important portion of a country's national gross domestic product (GDP). On average, total expenditure on health products and services is one of the highest line items in national budgets. In 2014, the World Health Organization (WHO)² estimated this number to be 10

percent of GDP on average. Thus by integrating sustainability considerations into health procurement, countries can support the development of more environmentally sustainable health systems,³ enabling governments and international organizations to progress towards achieving SDG 3 national targets. Advances in climate-smart healthcare⁴ can also strengthen the health sector, boosting access to clean and independent energy,⁵ safe water, clean transport⁶ and cleaner waste disposal.⁷

To support UN Member States in this process, the SPHS task team also delivered the official UN sustainable procurement training course – developed in partnership with UN Environment, UNOPS and the International Training Centre of the International Labour Organization – to a group of public procurement officials in 2016. Several modifications were made to the case studies and course materials to tailor it to the health sector context. During the training sessions, participants discovered methods for developing sustainable procurement policies, strategies, integrating sustainable practices into healthcare procurement processes and monitoring the implementation of their work.

A 6-month-old child receives a vaccine at an Anganwadi centre, which provides basic health care in Indian villages.
©UNDP India/Prashanth Vishwanathan



To enable this game-changing process, SPHS has invested in its collaboration with UN Member States, organizations and businesses. It has developed a global platform comprised of more than 3,800 experts who are leading the agenda. In support of SDG 17, the network is encouraging members to learn from one another and to draw lessons on what works – or what doesn't – so they can be adapted locally.

We have a mechanism for doing this: the Saving Lives Sustainably website.⁸ The website offers hundreds of examples of good practice on sustainable health procurement. Through this network, new sustainable procurement criteria and tools have also been developed. In partnership with other non-governmental organizations, the focus has been on developing practical guides for procurement officers to monitor their partners against International Environmental Conventions.⁹ The aim is to remove priority toxic chemicals

from procurement of health sector related goods while also supporting the development of a priority ban list of 200 chemicals that are known to have harmful impacts on human health and the environment.

SPHS members recognize how important it is to lead by example. They have pledged to work collaboratively with suppliers and manufacturers of health products.¹⁰ Successful responses hinge upon procurers' relationships with suppliers and manufacturers and how these are managed, measured and grown.¹¹ Growing interest in this area also contributed to the development of the recently adopted Ostrava Declaration on Environment and Health.¹²

Creating partnerships in many countries, at both the local and international levels, is enabling health sector procurers to pioneer new models of consumption, production and environmentally sustainable health ■

¹ UNDP (2017), 'The SPHS Annual Report 2016,' Istanbul, Turkey.

² World Health Organization (2014), 'Global Health Expenditure Database': <http://apps.who.int/nha/database/Select/Indicators/en>.

³ World Health Organization (2017), 'Environmentally sustainable health systems: a strategic document,' Copenhagen, Denmark: http://www.euro.who.int/_data/assets/pdf_file/0004/341239/ESHS_Revised_WHO_web.pdf?ua=1.

⁴ International Bank for Reconstruction and Development/The World Bank (2017), 'Climate-smart healthcare: Low-carbon and resilience strategies for the health sector,' Washington, D.C., USA: <http://documents.worldbank.org/curated/en/322251495434571418/Climate-smart-healthcare-low-carbon-and-resilience-strategies-for-the-health-sector>.

⁵ UNDP (2015), Solar for Health initiative: <http://www.undp-globalfund-capacitydevelopment.org/en/about-us/solar-for-health/>.

www.undp-globalfund-capacitydevelopment.org/en/about-us/solar-for-health/.

⁶ UNDP (2015), 'Carbon footprint of UNDP Global Fund health initiatives in Montenegro and Tajikistan,' Istanbul, Turkey: http://www.eurasia.undp.org/content/rbec/en/home/library/hiv_aids/Carbon_footprint_UNDP_Global_Fund_health_initiatives_Montenegro_Tajikistan/.

⁷ UNDP (2015), 'Environmental safeguarding and healthcare waste management of Global Fund HIV, TB and malaria projects,' Istanbul, Turkey: http://www.eurasia.undp.org/content/rbec/en/home/library/hiv_aids/rapid-assessment-healthcare-waste-global-fund/.

⁸ www.savinglivesustainably.org

⁹ UNDP (2016), 'A UNDP guide for procurement practitioners: Healthcare procurement and the compliance with international environmental conventions on chemicals,' Istanbul, Turkey:

https://issuu.com/informal_int_task_team_sphs/docs/compliance_with_int_conventions_on_

¹⁰ WHO, UNICEF, UNDP, the Global Fund, UNOPS, UNFPA, UN Environment, Gavi, UNITAID (2016), 'Joint Inter-Agency statement on engaging with suppliers and manufacturers to promote environmentally and socially responsible procurement on health commodities,' Geneva, Switzerland.

¹¹ UNDP (2016), 'The SPHS engagement strategy with suppliers and manufacturers on green procurement in the health sector,' Istanbul: https://issuu.com/informal_int_task_team_sphs/docs/sphs_engagement_strategy.

¹² 'Declaration of the Sixth Ministerial Conference on Environment and Health' (2017), Ostrava, Czech Republic: http://www.euro.who.int/_data/assets/pdf_file/0007/341944/OstravaDeclaration_SIGNED.pdf?ua=1.



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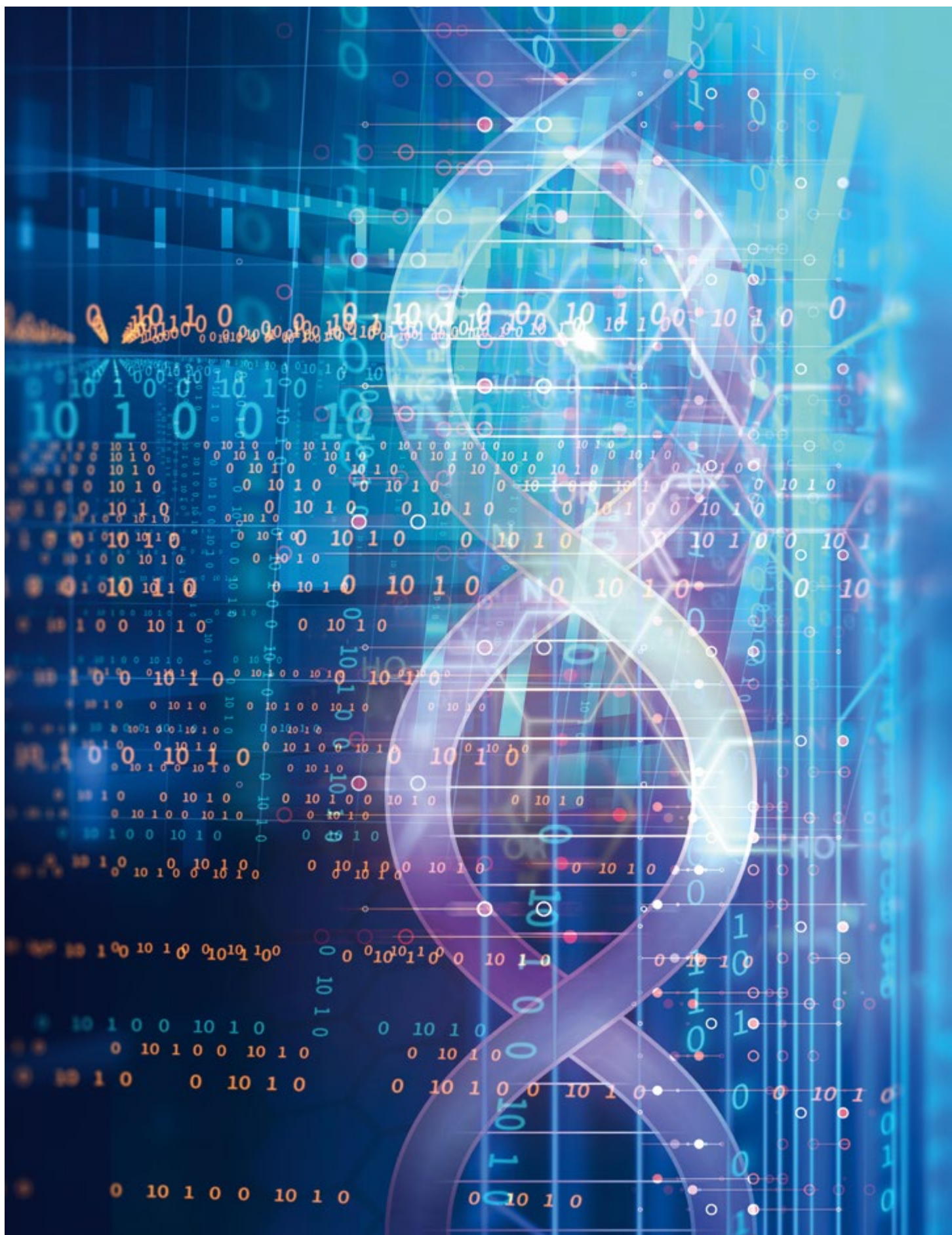
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Blockchain: The missing piece?

By Harry John, Procurement Leaders

Procurement connects suppliers, buyers, people, donors and recipient governments. It is a vital link to achieving the Sustainable Development Goals. But, for procurement to meaningfully contribute to sustainable development it has to be both transparent and efficient. With the multitude of stakeholders involved, how do we ensure this? The answer could lie in blockchain technology.

As goods move through supply chains, they are subject to thousands of lines of communication between governments, organizations and individuals. Records of contracts, invoices, orders and many other transactions create an imponderable number of data points.

For years, attempts to harness this data have seen companies experiment with sophisticated software and novel governance structures. But now, a fundamental change is on the horizon. One that challenges the essential way in which information is administered, not just between companies, but potentially right across societies.

That change comes in the form of blockchain, the distributed ledger technology behind virtual currency bitcoin.

What is blockchain?

A blockchain is similar to a database, shared by a group. Like Wikipedia, this database allows all members of the group to view and make entries to it, each one representing a 'block' of data. Unlike Wikipedia, though, there is no central mediator. Governance is distributed among the participants who vote on which entries to verify as accurate. Once added to the system, each block of data is tied by cryptography to all previous ones, forming an unalterable, chain-like structure of records. In theory, anybody with access to a blockchain is able to see the entire history of transactions recorded on it.

Although originally conceived as a means of allowing individuals to transact in bitcoin, blockchain can be used to record and transfer ownership of anything that can be represented in computer code.

In 2015, the European Commission announced it was investing €5 million in distributed ledger technology for decentralized management of data on European citizens. Greece, Honduras and Sweden are all reportedly using this technology for management of land registries.

Supply chains' best hope?

Blockchain also presents an alternative to the way transaction data is currently managed in supply chains. The technology is expected to cut through complexity and improve tracking of goods on the move, although blockchain is not without its limitations.

"Data exists [in supply chains] in paper form or in siloed systems, often within individual organizations, which might not agree with suppliers' and customers' systems," says a researcher familiar with the technology.

Because of these inefficiencies, the cost of processing bills of lading, export declarations and other trade documents is estimated to be one-fifth of the cost of physically moving goods around the world, according to a joint statement released by two large multinationals who are partnering to develop blockchain for use in commercial supply chains.

By creating digital versions of trade documents and uploading them to a blockchain, companies in the supply chain with access to the ledger could view the status of goods in transit on-demand – from the beginning of the supply chain to the end.

"We envisage a situation where, say, a farmer in Mombasa can upload documents or sign off on a shipment using a simple mobile application that connects to our blockchain," says a vice president at one company developing the technology for commercial use.

Stumbling blocks

Yet there are reasons to be sceptical. The willingness of the imaginary farmer in Mombasa, who the researcher notes has probably never heard the word 'blockchain,' to buy the hardware and software required to connect to a blockchain cannot be taken for granted. What is the use of a database that promises full visibility of a supply chain, if all parties in that supply chain don't contribute to it? The answer: Not much.

Then there is the question of reliability. By creating databases with no single governing authority, such as an organization or a government agency, legal questions relating to ownership and accountability of the information contained within those databases arise. Who, for instance, is to stop somebody with access to a blockchain feeding it bogus information? This question makes lawyers nervous.

In an interview, one lawyer points out that the "practical side" of recording the physical world on a blockchain "remains uncertain." If human intervention is required in that process, there will always be a risk of error or malpractice.

No technology can be expected to eradicate crooked behaviour. But the hope is that 'permissioned' blockchains – the kind the corporate world is currently most attracted to – assuage such concerns by making the identities of individuals who can access the system known to all others.

It is the 'permissionless' blockchains "where [in the eyes of regulators] the risk lies," says a senior policy advisor at one law firm. That is because anybody can theoretically access and make entries to these blockchains.

From a technical and a security perspective, the permissioned alternative is fundamentally different – but not infallible. As the policy advisor points out, these systems offer greater privacy than their permissionless counterparts. But because all participants to a permissioned blockchain must be known, those participants' identities must be managed centrally by somebody. The European Network and Information

Security Agency (ENISA) believes that may undermine blockchains' safety. As authors of a 2016 ENISA report write: "All problems that had required hijacking of the majority consensus, a task that was potentially significant in undertaking, are now replaced by the hijacking of a single entity."

As blockchain becomes more widely adopted, enthusiasts say it will become more powerful, while critics reckon its flaws will be exposed. "I always tell people that blockchain is here and now; the technology is ready," argues the vice president. That may be so, but the people, organizations and lawmakers who will ultimately oversee use of the technology are not ■



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A blockchain is a decentralized digital ledger of transactions that can be programmed to record almost anything of value with no intermediaries. Once information is entered, it's locked in – it can't be changed. ©Getty Images/Bannosuk



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