



# SDG Impact Valuation

Balancing the  
"Sustainability Equation"

---

[kpmg.co.za](https://www.kpmg.co.za)





# SDG Impact Valuation – Balancing the “Sustainability Equation”

In this article, we share the latest developments on the approaches to achieving the United Nations Sustainable Development Goals (SDGs), with a refreshed perspective – exploring the opportunities for organisations to use impact valuation methodologies, as strategic assessment tools to evaluate and make greater contributions towards accomplishing the goals.

“  
Learn how to  
see. Realise  
that everything  
connects to  
everything else.  
”

Leonardo da Vinci

## SDGs – Are we reaching the tipping point?

As the global communities around the world race against time to achieve the SDGs<sup>1</sup>, an important question arises: “**Are the objectives and targets of the SDG agenda achievable by 2030?**” The United Nations’ forecast<sup>2</sup> on viability of selected targets showed that some goals<sup>3</sup> are within 5% of the target (e.g. enrolment in primary school – Goal 4; reducing child mortality – Goal 5), whilst other goals maybe achieved with additional efforts - being within 5 -10% of the target (e.g. eradicating extreme poverty – Goal 1; access to safe sanitation – Goal 6). Targets related to addressing child labour issues - Goal 8 and inequality in income – Goal 10 are examples of areas that are relatively further off the mark and would probably require significant work to achieve substantial progress.

A recent scientific study<sup>4</sup> identified that deploying a systemic approach, through consideration of the interconnections between the goals and resultant co-benefits and trade-offs – would bring transformative impacts that accelerate the progress towards achieving the SDGs.

As an example, the study showed that the economic and social impacts or benefits of using a sustainable energy system potentially outweighs the associated costs of transition/ deploying the system. It is estimated that for every dollar spent on shifting to a sustainable energy system, would generate between \$3 and \$7, in the form of savings from reduced air pollution, improved health and lower environmental damage arising from the transition could be avoided.

This brings a refreshed perspective for global communities to rethink their approach to SDGs, perhaps, advancing from the traditional method of individually pursuing each goal and target. In general, this would require organisations to have a deeper understanding of the interlinkages between the economic, environmental and social impacts of their initiatives in addressing the SDGs, particularly in quantifiable monetary terms.

<sup>1</sup> In 2015, countries adopted the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals. These goals universally apply to all - countries will mobilise efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind <https://www.un.org/sustainabledevelopment/development-agenda/>

<sup>2</sup> The United Nations (2019). *Global Sustainable Development Report – The Future is Now*

<sup>3</sup> SDGs: Goal 1 – No Poverty; Goal 4 – Quality Education; Goal 5 – Gender Equality; Goal 6 – Clean Water and Sanitation; Goal 8 – Decent Work And Economic Growth; Goal 10 – Reduced Inequalities

<sup>4</sup> The United Nations (2019). *Global Sustainable Development Report – The Future is Now*

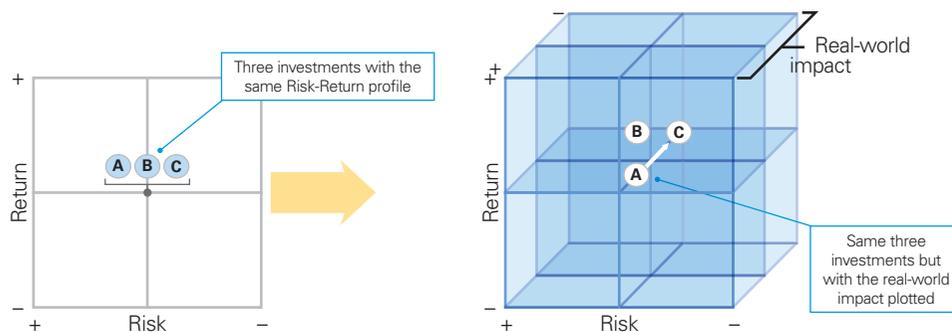
## Sustainability speaks louder in the financial language

An organisation's environmental and social performance is usually measured based on the direct outputs of its related core activities in the form of products and services, by-products, waste, etc. Disclosures on the quantities of the direct outputs, which are measured in disparate units – exhibit only half of the story. Consideration of the impacts<sup>5</sup> (or externalities) i.e. magnitude of the resulting consequences or effects of these outputs (positive or negative) on the society and environment at large – would provide the complete story.

As an example, in the mining industry<sup>6</sup> – the examples of material negative environmental externalities are greenhouse gas emissions and the mine's pollution of water resources, due to acid water drainage from mine operations. The trade-offs are in the form of some positive environmental externalities from renewable energy generated on site, which avoids some emissions that would have otherwise occurred through conventional power generation. It also generates positive environmental externalities from the reuse of waste materials from the production process. Converting the disparate impacts into monetary value allows companies to compare its environmental and social impacts relative to its financial performance and ultimately quantify its true financial earnings.

Asset owners and investors have begun using a more inclusive approach in assessing their investment portfolios – driven by long-term beneficiary considerations in terms of SDGs<sup>7</sup>. They are keen to find out how their investment portfolio affects the broader objectives of society, creating real-world impact.

This provides them a complete view of the potential value creation of an investment through quantification of the Net Present Value (NPV) of investments, which create both corporate and societal value in the most cost effective way possible.



Source: UNEP FI & UNGC – Asset Owner Strategy Guide: How to Craft an Investment Strategy

## Frameworks for measuring the “(in)tangibles”

Impact valuation is an emerging topic – there are various types of frameworks that are used by market participants to measure the significance of social and environmental externalities arising from their business operations. Some examples<sup>8</sup> of the frameworks are the Natural Capital Protocol (National Capital Coalition (NCC)), Social Capital Protocol (World Business Council for Sustainable Development (WBCSD)), The Prince's Accounting for Sustainable Project and Social Return on Investment framework (Social Value UK).

The Social Return on Investment (SROI)<sup>9</sup> framework provides the guidelines for measuring, managing and accounting for social value or social impact. The impact analysis based on this framework is divided into six stages. The approach involves development of an impact map demonstrating the relationship between inputs, outputs and outcomes of an organisation's activities. This is followed by identification of evidence and valuation on/monetisation of the outcomes. The sum of the monetised positive and negative impacts would provide the ultimate impact of the investment.

The KPMG True Value approach<sup>10</sup> is a three-step approach. It begins with identifying the organisation's positive and negative externalities, and monetising them, i.e. to quantify in financial terms. The externalities are classified as either economic, social or environmental, and as either positive or negative. Only those externalities that are material to the organisation, its stakeholders, society and the environment are evaluated.

The most appropriate data for quantification are selected from both within the organisation and from outside sources. Similarly, the most relevant quantification methods must be selected from a range of options, including company valuation techniques, economic impact analysis and environmental economics.

By combining financial and monetised externality data, we can form a broader view of the organisation's value creation that includes both corporate and societal value. Based on our methodology, we do this by presenting the information in a 'true' earnings bridge (see diagram on the following page). The 'true' earnings bridge helps businesses to visualise the organisation's most significant positive and negative externalities and understand where the organisation's actions may be creating or reducing societal value.

<sup>5</sup> RobecoSAM (2019). *The Sustainability Yearbook 2017*

<sup>6</sup> KPMG International Cooperative (2014). *A New Vision of Value: Connecting corporate and social value creation*

<sup>7</sup> UNEP FI & UNGC – Asset Owner Strategy Guide: How to Craft an Investment Strategy

<sup>8</sup> The Conference Board (2019). *Total Impact Valuation – Overview of Current Practices*

<sup>9</sup> The SROI Network (2012). *A guide to Social Return on Investment*

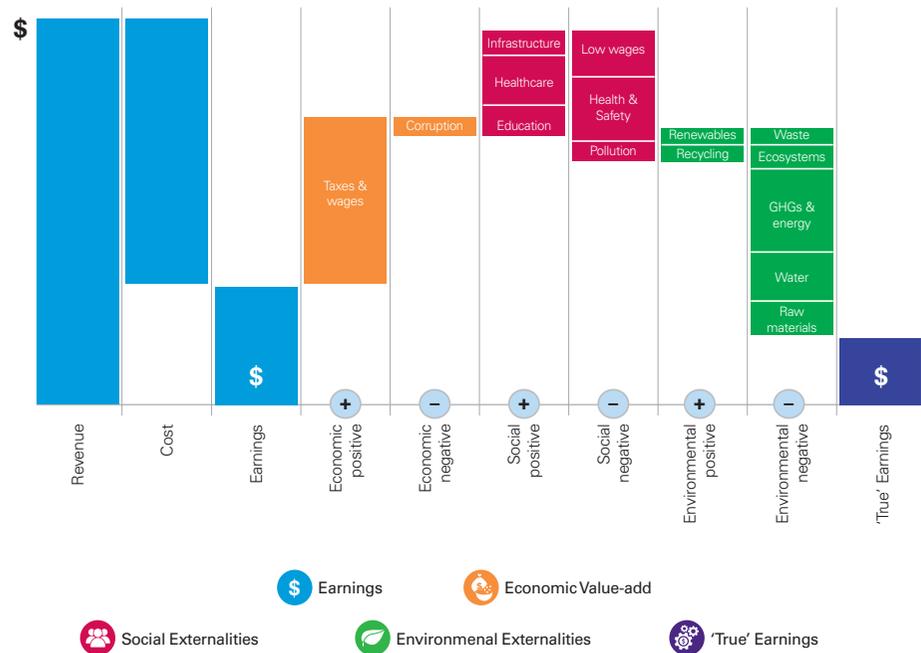
<sup>10</sup> KPMG International Cooperative (2014). *A New Vision of Value: Connecting corporate and social value creation*



The second step involves analysis of the organisation’s exposure to internalisation of its negative externalities i.e. quantification of potential risks to earnings through reduced revenues, increased costs or increasing investment requirements.

In Step 3, companies would be able to build business cases for investments that create both corporate and societal value in the most cost effective way possible. There are two broad approaches to achieve this i.e. (1) invest in reducing negative externalities which can reduce the risk of costs resulting from materialisation of negative externalities (e.g. regulatory changes, changing customer behaviour, etc.); (2) invest in increasing positive externalities which can yield returns (e.g. brand enhancement, development of new products and services and identifying new operating models and routes to market).

### “True” Earnings Bridge



## Rethinking business models –SDG-inspired “Game Changers”

### Case Study 1<sup>11</sup> – Safaricom Limited



Safaricom Limited is the largest mobile operator in the Kenyan market. Safaricom aspires to use its mobile telecommunications products and services to improve the quality of life and contribute to sustainable livelihoods for people throughout Kenya. The company has been using the KPMG’s True Value methodology to identify the company’s most material socioeconomic and environmental impacts and to quantify them in financial terms to understand how successful it has been in achieving this goal and how it can further increase the value it creates for society in Kenya. Safaricom conducts the analysis and discloses the assessment results in its Sustainable Business Report on an annual basis. The yearly total value Safaricom creates for the Kenyan society is estimated at around ten times greater than the actual financial profit the company makes in the same period.

<sup>11</sup> KPMG International Cooperative (2015). *KPMG True Value Case Study – Safaricom Limited*





## Case Study<sup>12</sup> – Volvo Group



Electric buses face challenges in terms of gaining share in the city transport market space. Municipalities and transport authorities must base their investment decisions on the best available data which usually focuses solely on direct financial costs. That is why Volvo Group decided to show leadership in the transport sector and the global sustainable development movement by quantifying the environmental and social value created by electric buses. KPMG professionals assisted Volvo Group in conducting an analysis to understand how the total cost of electric buses compares with that of diesel and biogas buses when social and environmental impacts are taken into account. The outcome of the analysis showed that the *True Total Cost of Ownership*<sup>13</sup> of an electric bus is lower than that of a diesel bus when the costs of environmental and socio-economic impacts are taken into account.

The analysis suggests that if all city buses in Sweden were electric, it could save Swedish society approximately US\$225 million (€199 million) per year of which US\$45 million (€40 million) could be savings in public healthcare costs. Passengers could save 14 million hours of travel time per year and Sweden's carbon emissions could be reduced by 84,000 tons per year (approximately equivalent to the annual per capita emissions of 15,000 Swedish citizens). The analysis supports Volvo Group's vision to be the world leader in sustainable transport solutions. It contributes to a number of SDGs and is also aligned with the WWF Climate Savers program.

<sup>12</sup> KPMG International Cooperative (2015). KPMG True Value Case Study – Volvo Group

<sup>13</sup> True Total Cost of Ownership – is based on the established Total Cost of Ownership (TCO) management process. In this context, the approach uses valuation techniques from KPMG True Value methodology which quantifies social and environmental value creation in financial terms.



## Case Study 3<sup>14</sup> – NS Group



NS Group is the largest public transport operator (railways) in Netherlands. NS is conscious of the value it creates for society by providing mobility but is also aware that it has some negative effects on society (e.g. greenhouse gas emissions). Its long term decision is to increase the value it creates for society while reducing its negative impacts and delivering healthy financial returns. In 2014, NS used the KPMG True Value approach to calculate the socio-economic value, as well as the environmental value it creates and reduces for society.

Based on the analysis, the value of the mobility provided by NS was calculated at a minimum of €7 billion (excluding the benefits of reduced congestion). Travelling by train is relatively safer when compared to travelling by car because far fewer accidents and injuries occur – this positive value was calculated at about €430 million. The negative impact to the society, due to accidents that occur when passengers travel to and from NS stations was valued at €100 million. The positive environmental impact based on the amount of emissions and air pollution that were avoided (travellers choose to travel by rail instead of by car) was quantified at €90 million. Relatively, around €70 million of the negative environmental value comes from the use of fossil fuels for powering trains.

<sup>14</sup> KPMG International Cooperative (2015). KPMG True Value Case Study – NS (Dutch Railways)



## Case Study<sup>15</sup> – Cementos Argos



Cementos Argos (“Argos”) is the largest producer of cement in Colombia and one of the leading producers in Colombia, the Caribbean and North America. In 2015, the company decided to measure the value it creates and reduces for the society. The company’s net value to society was quantified at 4.73 times its retained earnings. Argo’s most significant economic impact arises from the payment of salaries and benefits to employees. This stimulates the economy and was valued at USD 454.2 million. Societal value created through taxes paid to the government was quantified at USD 273.7 million and societal value of USD 241.8 million arises from payments to capital providers. 78% of Argos’ negative environmental impact arose from greenhouse gas emissions.

### Conclusion

The case studies presented in this article are strong examples of how various stakeholders (e.g. governments and companies) can drive the SDG agenda (e.g. development of sustainable cities) through sustainable innovation, by quantifying external social and environmental impacts that, until now, have usually been unpriced. Impact valuation serves as a strategic management tool for businesses and investors for better decision-making, strengthening reporting, promote stakeholder dialogue, and measure their contributions to achieving the SDGs. We fully support the work being done by various organisations such as WBCSD and NCC to achieve a standardised approach. KPMG expects that the standard or accepted methodology for impact valuation should begin to mature and crystallise in the coming years.

<sup>15</sup> KPMG Advisory Services S.A.S (2018). KPMG True Value Case Study – Cementos Argos



## How Can We Help You

KPMG True Value is a flexible methodology that can be applied to any company in any sector.

While every KPMG True Value project is different, three common uses have emerged in recent years:

### 1. Improve decision-making



When it comes to selecting which projects and activities to progress, KPMG True Value helps corporate decision-makers to look further than financial return-on-investment. By providing data-driven insight into impacts on people and the environment, KPMG True Value helps business leaders factor these considerations into investment decisions, alongside conventional financial data. This can help companies reduce risks and enhance drivers of growth.

### 2. Enhance reporting and strengthen relationships



KPMG True Value can provide a far richer view of a company's contribution to society than conventional financial or sustainability reporting alone. That's why many companies use KPMG True Value to enhance their corporate reporting. Transparency around social and environmental impacts can help to strengthen corporate relationships with critical stakeholders like investors, governments, customers and NGOs. It may also help to improve performance in corporate sustainability ratings.

### 3. Build the business case for innovation



KPMG True Value helps innovators measure the impacts of products and services on people and the environment. With pressure growing on businesses to demonstrate a (net) positive contribution to society, KPMG True Value can play an important role in the innovation process. It can help companies maximise the positive impacts of their products and services, thereby creating a point-of-difference in the marketplace and potential competitive advantage.

A woman with dark skin, wearing a light blue blazer over a white and black striped top, is holding a gold smartphone in her right hand. The background is a solid teal color with faint, out-of-focus circular patterns. A white circular callout bubble is positioned in the upper left quadrant, containing the text 'Contact us to find out how we can help you'. A thin white line extends from the right side of the bubble to a small white dot on the back of the smartphone.

**Contact us  
to find out  
how we can  
help you**



**Neil Morris**

Director  
Climate Change & Sustainability  
KPMG South Africa  
**M:** +27 83 286 7194  
**E:** neil.morris@kpmg.co.za



**Paresh Lalla**

Director  
Climate Change & Sustainability  
KPMG South Africa  
**M:** +27 83 276 5373  
**E:** paresh.lalla@kpmg.co.za



**Gunarani Ganasagar**

Senior Manager  
Climate Change & Sustainability  
KPMG South Africa  
**M:** +27 71 313 6964  
**E:** gunarani.ganasagar@kpmg.co.za



**Naeem Khan**

Manager  
Climate Change & Sustainability  
KPMG South Africa  
**M:** +27 72 111 1071  
**E:** naeem.khan@kpmg.co.za

[kpmg.com/socialmedia](https://kpmg.com/socialmedia)



[kpmg.com/app](https://kpmg.com/app)



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

© 2019 KPMG Services Proprietary Limited, a South African company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. Printed in South Africa. KPMG and the KPMG logo are registered trademarks of KPMG International Cooperative ("KPMG International"), a Swiss entity.