



kpmg

# KPMG

# True

# Value

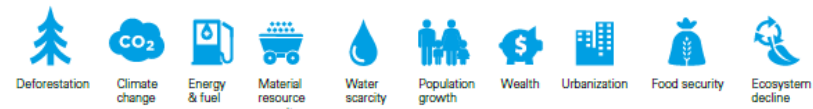
21 September 2017

Shared Value

Forum

# Radical transparency & growing internalization of externalities

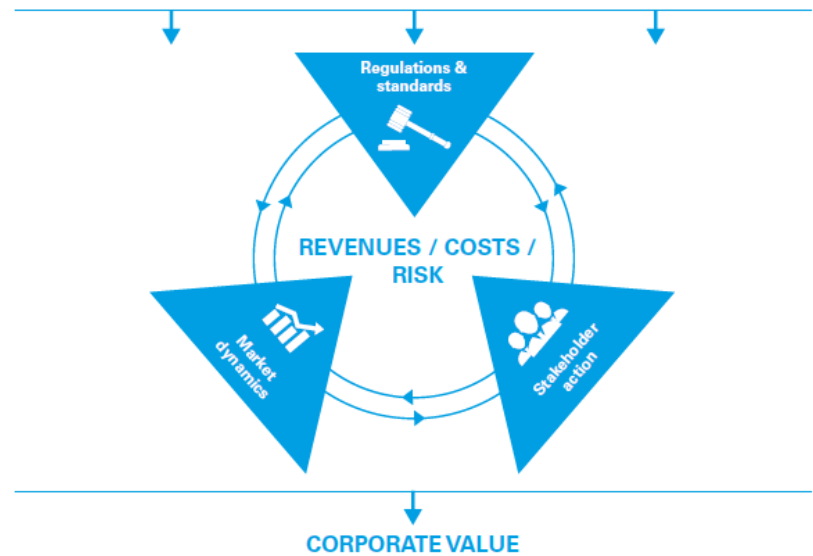
What is driving the pricing of externalities?



Regulation and Standards  
*Laws, taxes, subsidies, certifications*

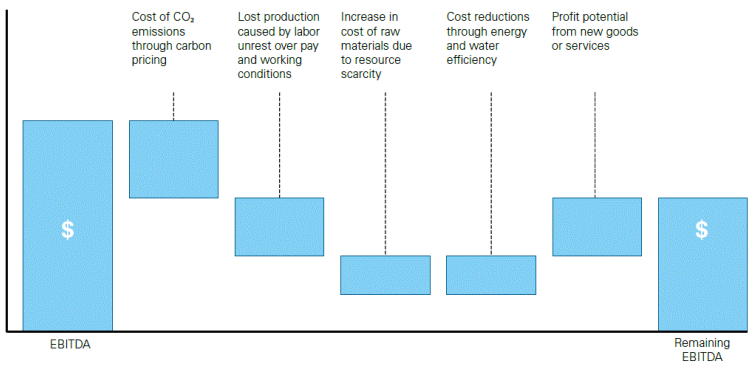
Stakeholder Action  
*Shifts towards sustainable value chains – paying true price*

Market Dynamics  
*Disruptions in supply and demand*



Source: KPMG (2014). *A New Vision of Value: Connecting corporate and societal value creation.*

Example analysis of internalized externalities



# KPMG's true value methodology: three-step approach to measure and manage societal and environmental impacts

## 1 ASSESS THE COMPANY'S 'TRUE' EARNINGS

by identifying and quantifying its material externalities

## 2 UNDERSTAND FUTURE EARNINGS AT RISK

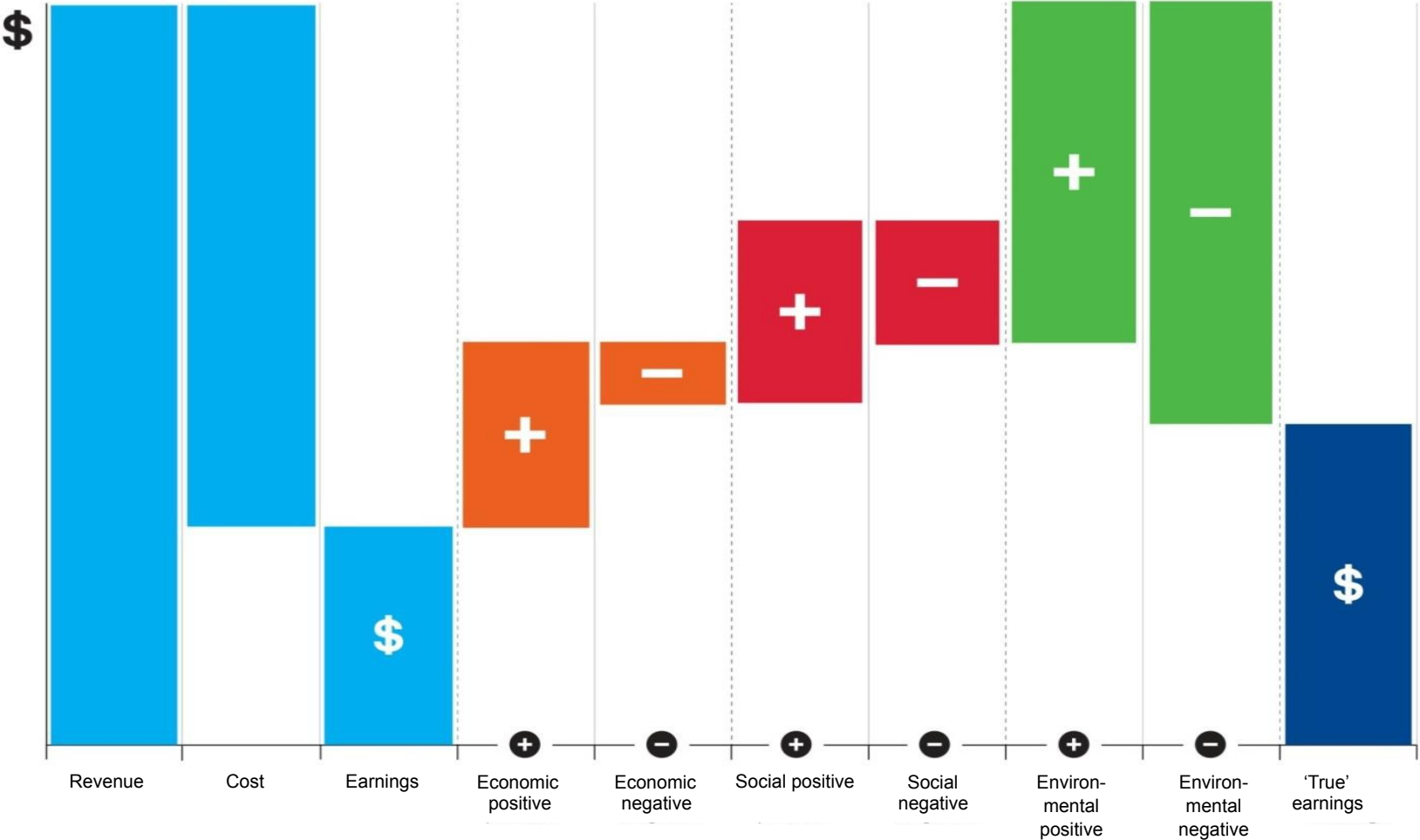
by analyzing exposure to the forces of internalization

## 3 CREATE CORPORATE AND SOCIETAL VALUE

by developing business cases that capture value, create opportunities and reduce risk.



# Step 1: Assess the company/ product/project's 'true' value



# Step 1: Assess the company's 'true' earnings by identifying and quantifying its material externalities

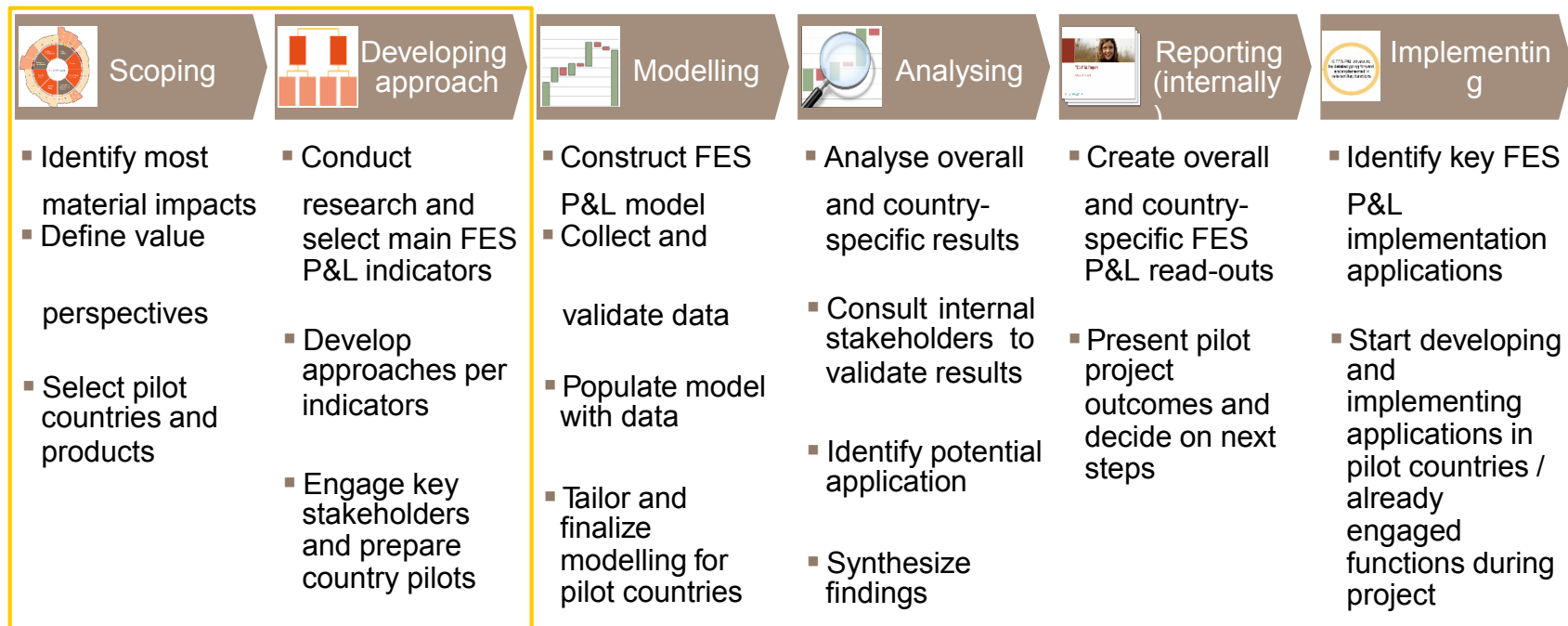


The first step in KPMG's True Value methodology is to identify the company's positive and negative externalities and to monetize them, i.e. to quantify them in financial terms

## Benefits to business leaders and investors

- Provides a clearer view of the company's externalities
- Enables a more balanced conversation with stakeholders on value creation, exploring positive as well as negative societal value created
- Provides a strategic lens of corporate and societal value creation

# Step 1 project flow example – much emphasis on scoping and approach development phase...



# Step 2: Understand future earnings at risk

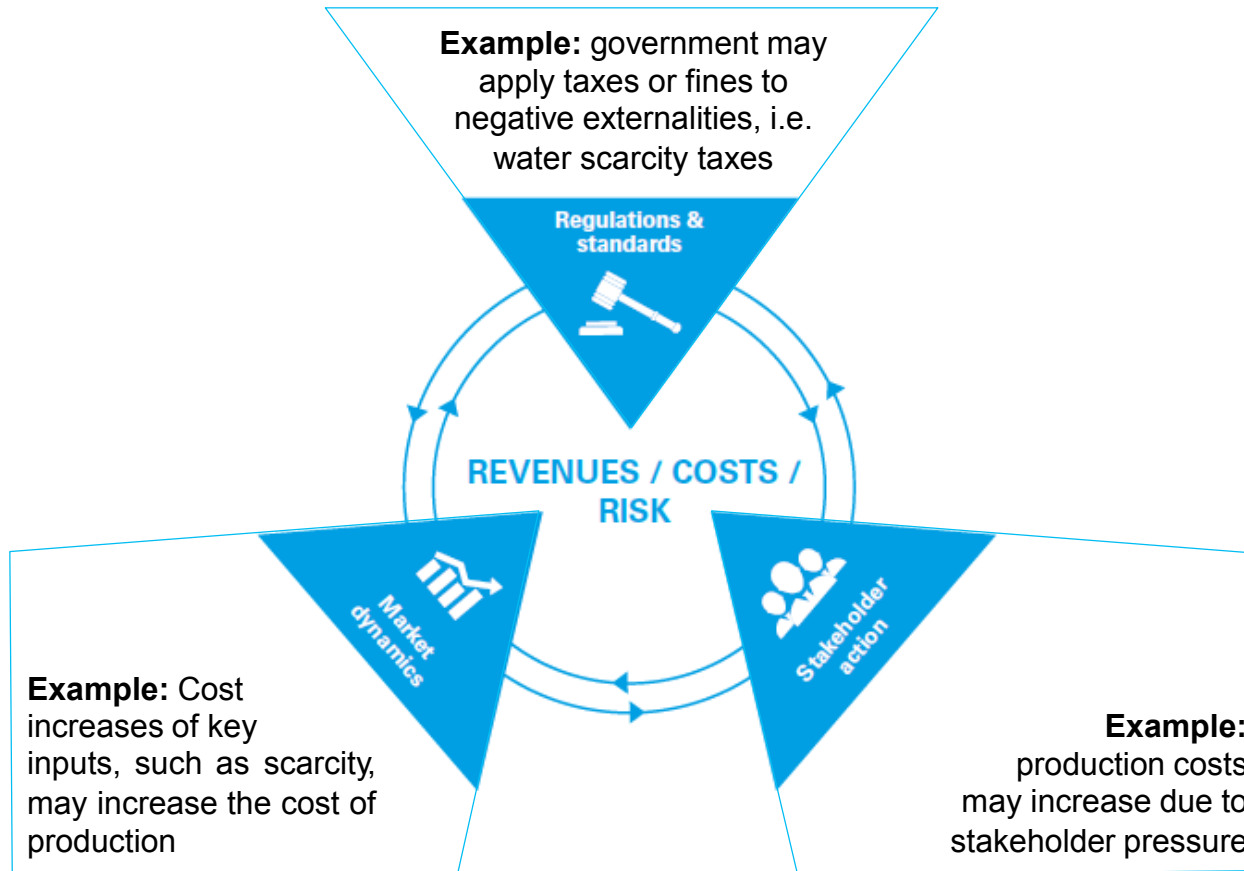


Understand how the externalities identified in step 1 may be internalized by the three drivers of internalization and the extent to which those drivers could affect earnings

## Benefits to business leaders and investors

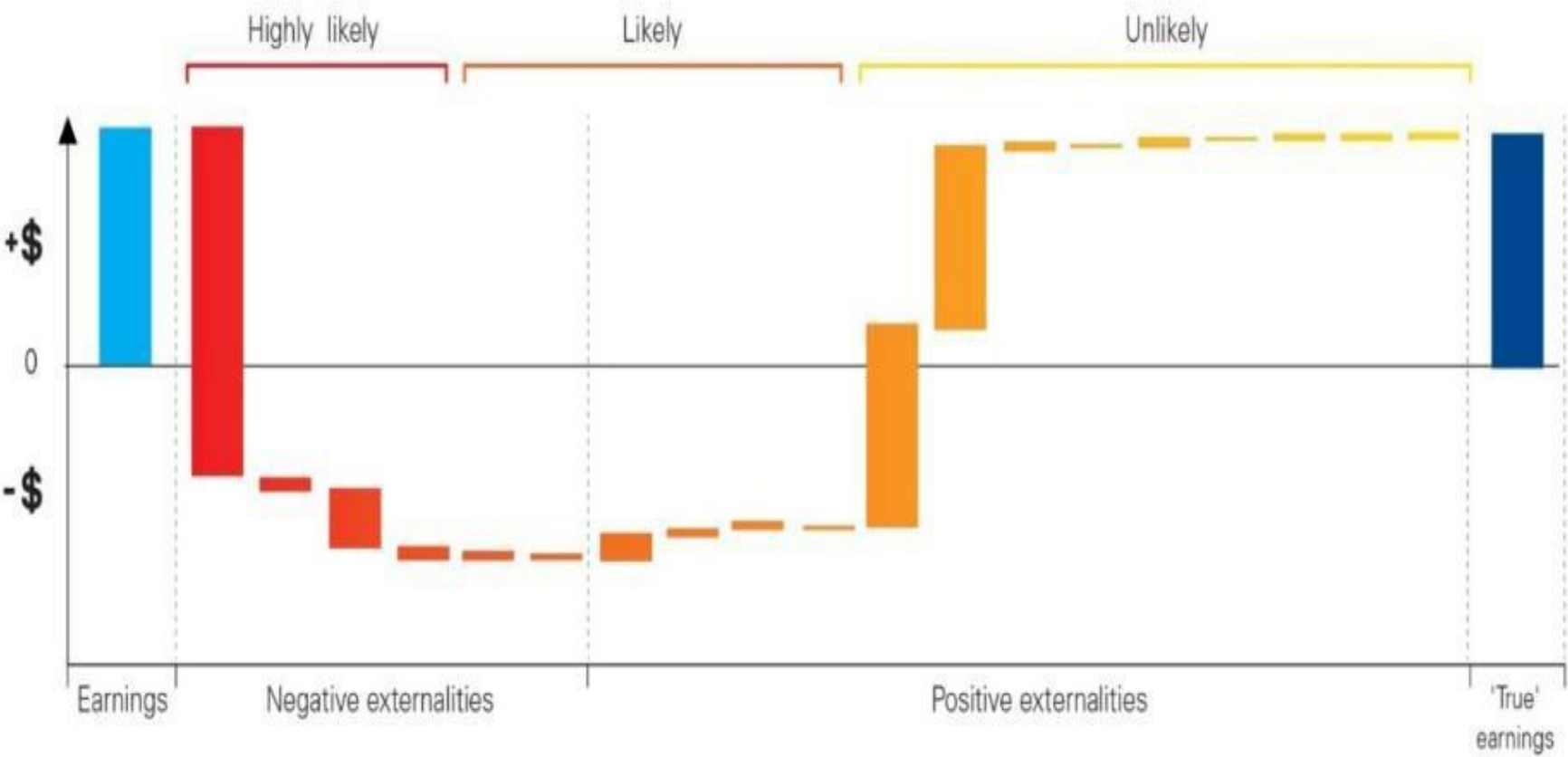
- Enables understanding of the company's exposure to internalization of its negative externalities
- Quantifies potential risks to earnings through reduced revenues, increased costs, or increasing investment requirements
- Provides information to guide risk-reduction strategies.

# Step 2: Understand future earnings at risk through drivers of internalization





# Step 2: Understand, prioritize and assess future earnings at risk



# Step 3: Create corporate and societal value

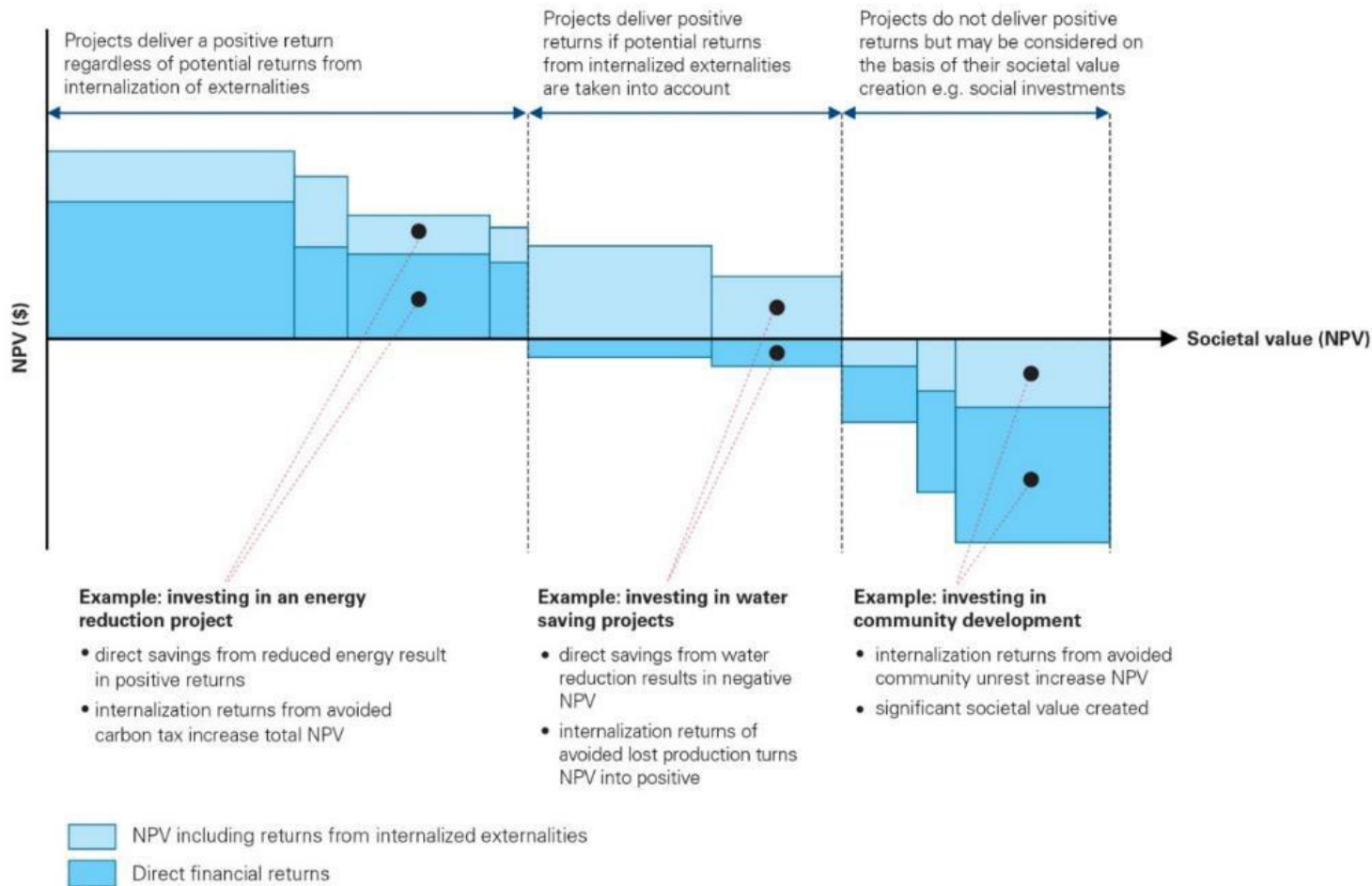


Step 3 helps companies to build business cases for investments that create both corporate and societal value in the most cost effective way possible

## Benefits to business leaders and investors

- Provides a more complete (i.e. corporate and societal) view of the potential value creation of an investment
- Quantifies the Net Present Value of investments including likely internalization of externalities
- Provides insights to make balanced investment decisions on maximization of both corporate value and societal value.

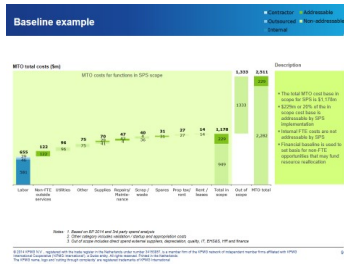
# Step 3: Create corporate and societal value – building the business case



# Combined approach could inform revenues & costs hypotheses through True Value lens to shape sustainable business cases

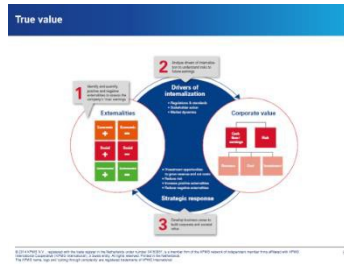
1

## Baseline revenues and costs of business



2

## Select key product(s) / category(ies) & identify true value



3

## Apply hypotheses-driven approach to value creation

**Benefit example**

Key quantitative hypotheses	Addressable base	PBL potential
M1: Maintenance: Replacing equipment may lead to reduced supplier and repair expense	\$45.2M (25%)	\$2.2M (5%)
M2: Spare parts inventory: Replenishing equipment may lead to reduced spare parts expense	\$71.9M (39%)	\$3.9M (9%)
M3: Operations: Increasing plant standards may reduce non-conformance cost	\$4.9M (3%)	\$1.3M (3%)
M4: Facilities - staff services: Increasing staff services to handle contracts may reduce spend	\$12.2M (7%)	\$2.7M (6%)
M5: Facilities - bond services: Bundling MRO including materials management across sites may reduce spend	\$91.1M (49%)	\$9.9M (22%)
<b>Total</b>	<b>\$225.0M</b>	<b>\$22.0M</b>
	<b>CAPEX potential</b>	<b>\$11.1M</b>
		<b>\$1.1M</b>

4

## Develop business / value cases

**Quantitative hypothesis example (basis for business case)**

Quantitative benefit hypotheses	Addressable base	PBL potential
M1: Operations: Increasing plant standards may reduce non-conformance cost	\$4.9M (3%)	\$1.3M (3%)

**Cost base, quantification method and rationale**

- Addressable cost base of \$4.9M (high value equipment (HVE) of \$45M)
- Operational loss to direct materials inventory (DM) - 20% of stock to inventory to direct materials
- Operational loss to indirect materials - 20% of indirect materials related to equipment (equipment related issues) (non-standardization)

**Key assumptions**

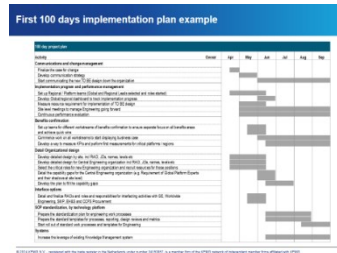
- A minimum of 20% and a maximum of 30% of the addressable base of the indirect stock is carried
- 20% of indirect materials related stock is attributable to equipment issues

**Implementation**

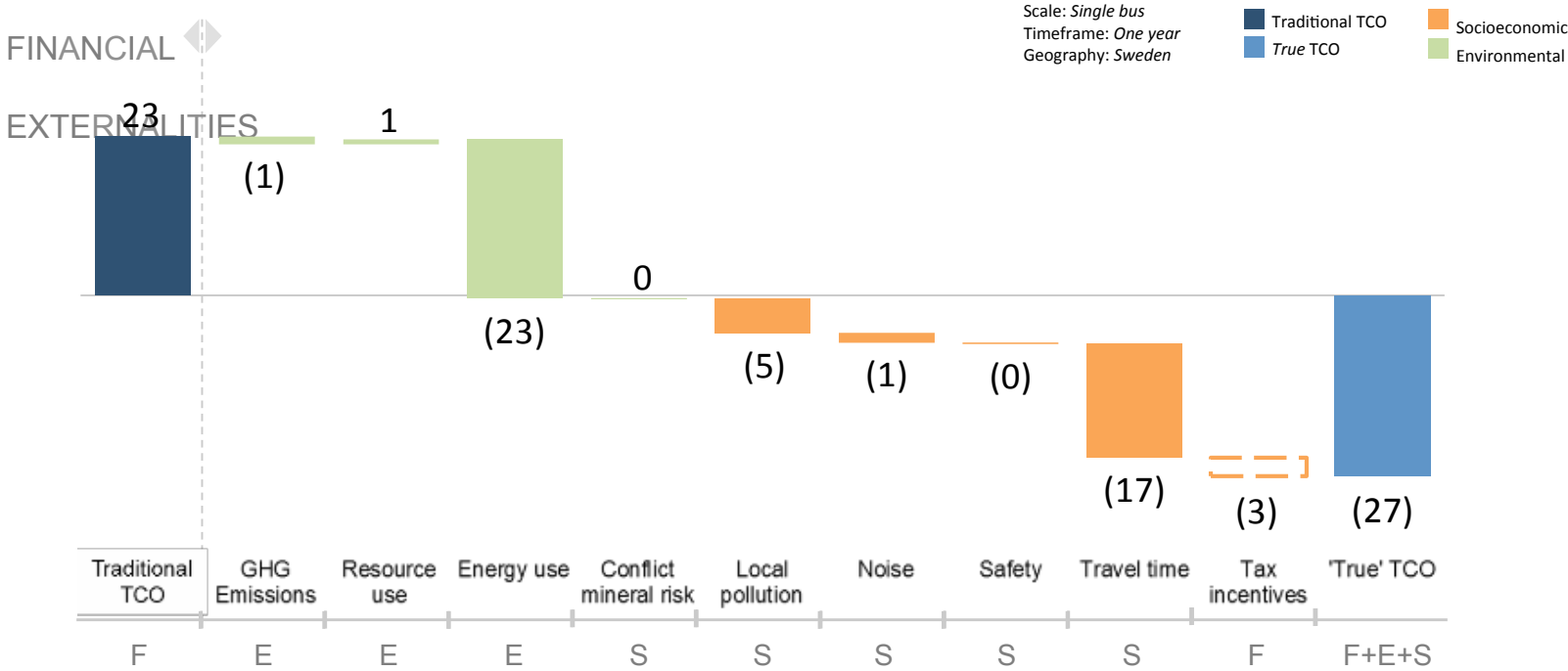
- Start: 2024
- End: 2026

5

## Define implementation plans

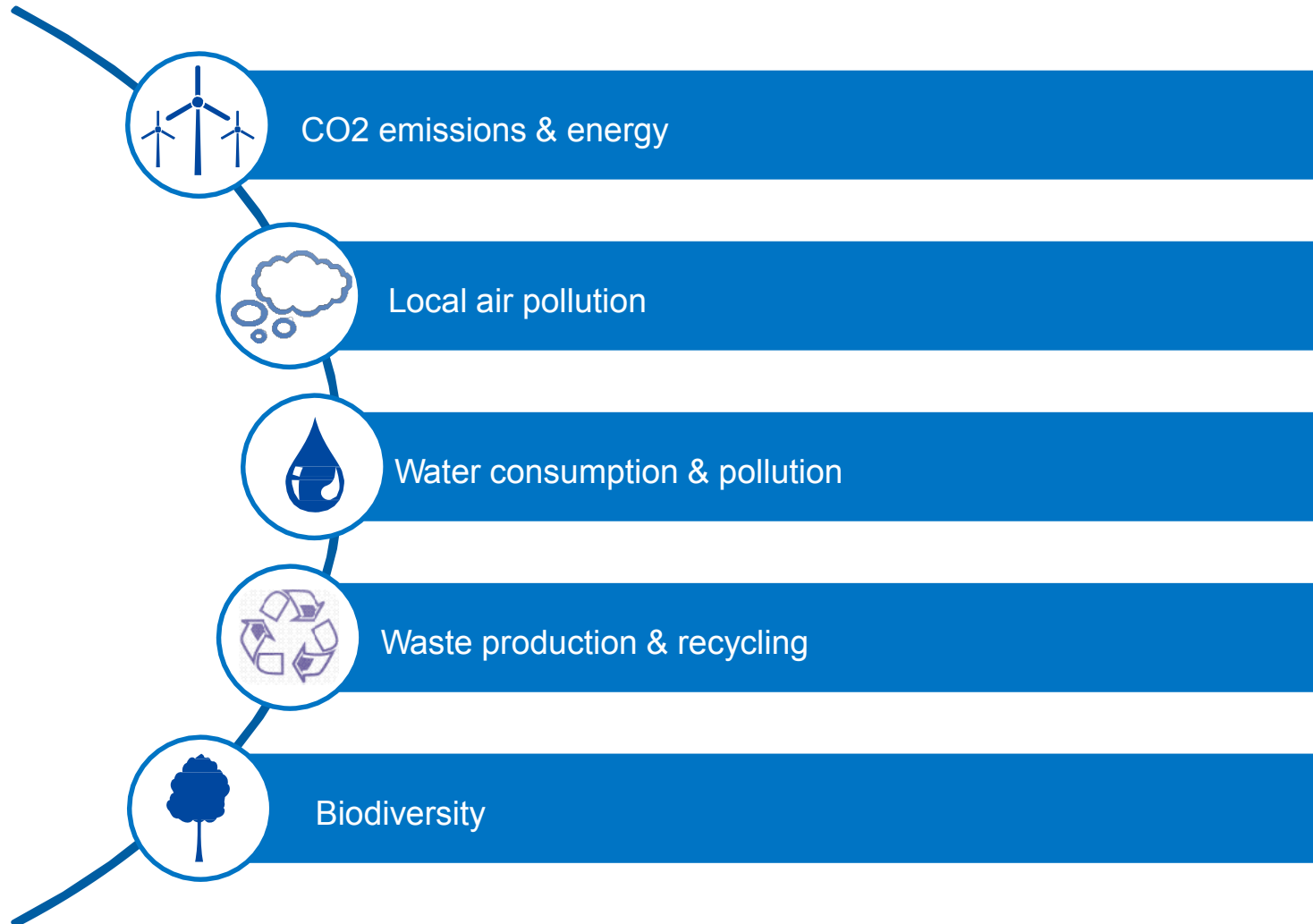


# Helping to transform asset management, to include externalities as part of Total Cost of Ownership / Utilization over product lifecycle



Based on the KPMG True Value methodology with Volvo data

# Overview of environmental indicators



# Measuring Social Value

- Standard for social value measurement is still under development –
- [Janne Dietz \(KPMG NL\) was seconded last year to the WCSD in Geneva to help come to a standard a wrote the paper: “Social Capital in Decision-Making: How social information drives value creation”](#)
- Social value requires often a bespoke approach per project (dependent often on materiality and data availability)
- Bespoke approaches are devised by following steps of the impact chain:

Step	Description
<b>1. Input</b>	The resources necessary to carry out an activity. These indicators can be monetary, material or social related
<b>2. Beneficiaries</b>	The target population (direct and indirect) benefiting from or being impacted from the implementation of an intervention or product
<b>3. Output</b>	The results of the activity in question or the volume of work accomplished by the company or project. Common ‘output’ indicators include volumes sold and numbers of people reached
<b>4. Outcome</b>	Advantages, disadvantages or neutral changes for stakeholders as a result of the output
<b>5. Impact Definition</b>	The long-term societal consequences of the outcomes. The impact can be both direct and indirect
<b>6. Quantitative Impact Indicators</b>	Quantitative indicators that express impact in a certain quantity
<b>7. Valuation Approach</b>	Valuation relates to the different approaches associated with the measurement of change in ‘welfare’ of individuals and society in aggregate

# Mobility & Travel Time

At the core of all transport related companies:

+ **Mobility**: “Transport of people (or goods) from A to B”

- **Travel Time**: “Time is Money”

## Method & Basic Concepts

- Coefficient based on **Revealed Preference** is used in Societal Cost Benefit Analysis
- Basic Concepts:
  - Value of Time (VoT)
  - Value of Reliability (VoR)
  - New Concept currently being developed : Value of Convenience
  - Travel Time Multipliers (i.a. waiting, walking, crowdedness)



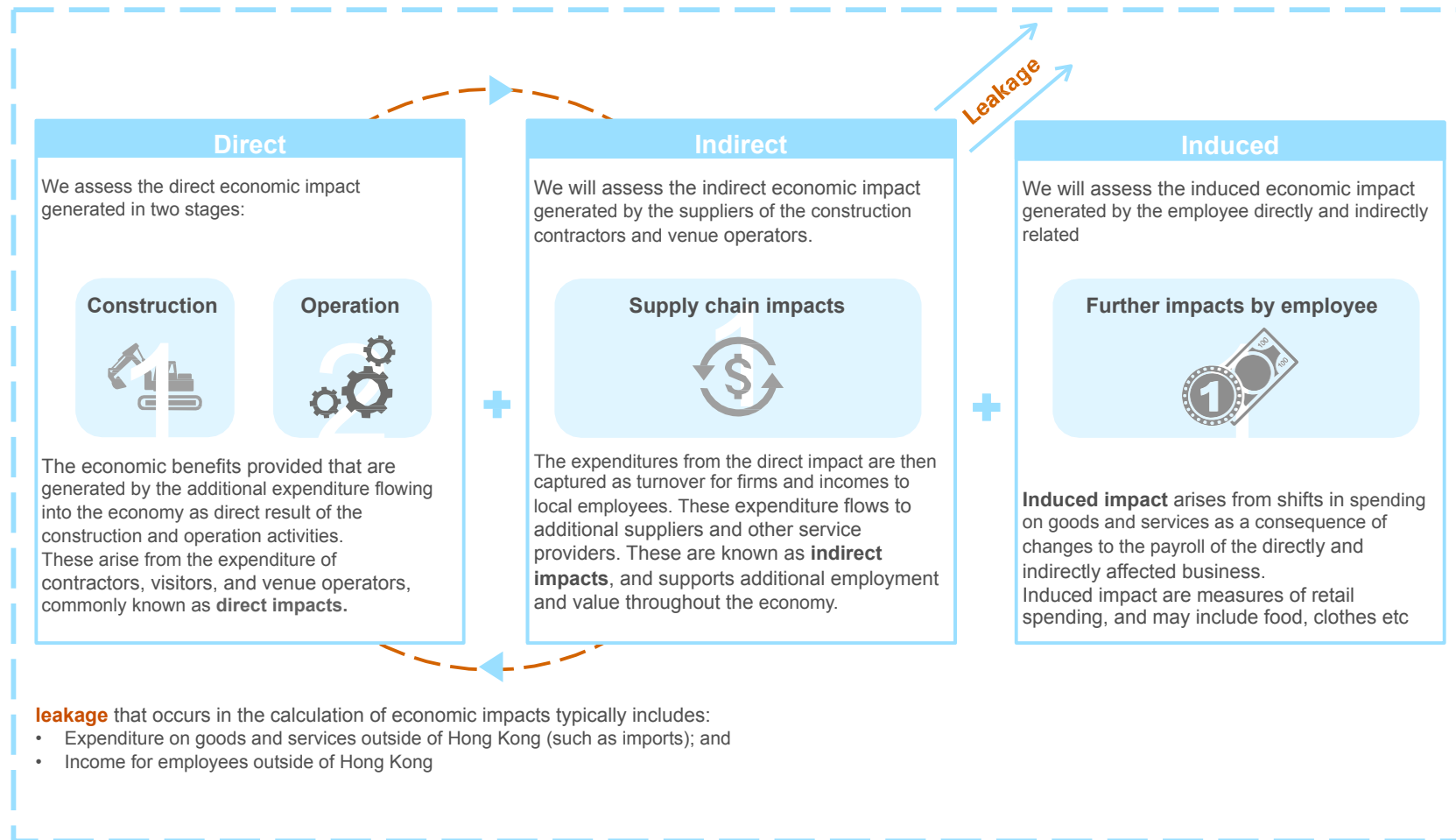
# Wellbeing

- Measurement of employee wellbeing is a field **still under development**, no integral multipliers available to date yet, requires bespoke approach and should be related to certain programs
- Available studies often US focused due to larger internalization of health care cost for employers
- **'Hot' topic** right now in real estate, e.g. building design and influence on productivity and medical cost
- Practical issue during engagements: limited data available (even pharma companies)

## Examples SROI from studies

- For every \$ spend on wellness programs at companies \$6 dollar SROI (\$3.27 in medical cost and \$2.27 in absenteeism, productivity outcomes are not included) – similar return for tobacco programs
- Obese employees have on average 105% higher costs for prescriptions and 39% higher primary care costs. Overweight employees cost for prescription costs were 37% higher and primary care costs were 13% higher. Obese employees are on average 3.72 days absenteeism and have 6% higher chance to claim disability
- Every \$ spend on biking or hiking trails results in a 3\$ dollar medical cost saving

# Economic Valuation



# The Link

Annual Report 2014/2015  
Strategic Report

Expanding horizons,  
exploring new  
opportunities

**領匯**  
**The Link**  
The Link Real Estate  
Investment Trust  
Stock code: 823



Lok Fu Plaza interior after asset enhancement

**OTHER FINDINGS INCLUDE:**

Lok Fu Plaza	Lok Fu Market
<b>+29%</b>	<b>+23%</b>
INDUCED SHOPPERS	
<b>+50%</b>	<b>+50%</b>
TOTAL SPENDING	
<b>+10%</b>	<b>+14%</b>
DURATION OF STAY	

**QUANTIFYING OUR VALUE CREATION:  
BEYOND OUR FINANCIAL STATEMENTS**

As an extension of the living room, we also have an impact on uplifting the standard and quality of life for those around us. Some of the long-term community benefits our enhancement works offer include: creating new jobs during and after enhancement works, providing shoppers with more retail choice and improving accessibility. Quantifying these socio-economic contributions of our shopping centres is just as important as measuring financial performance. Only by taking into account both of these measurements can we demonstrate the overall effectiveness of our business.

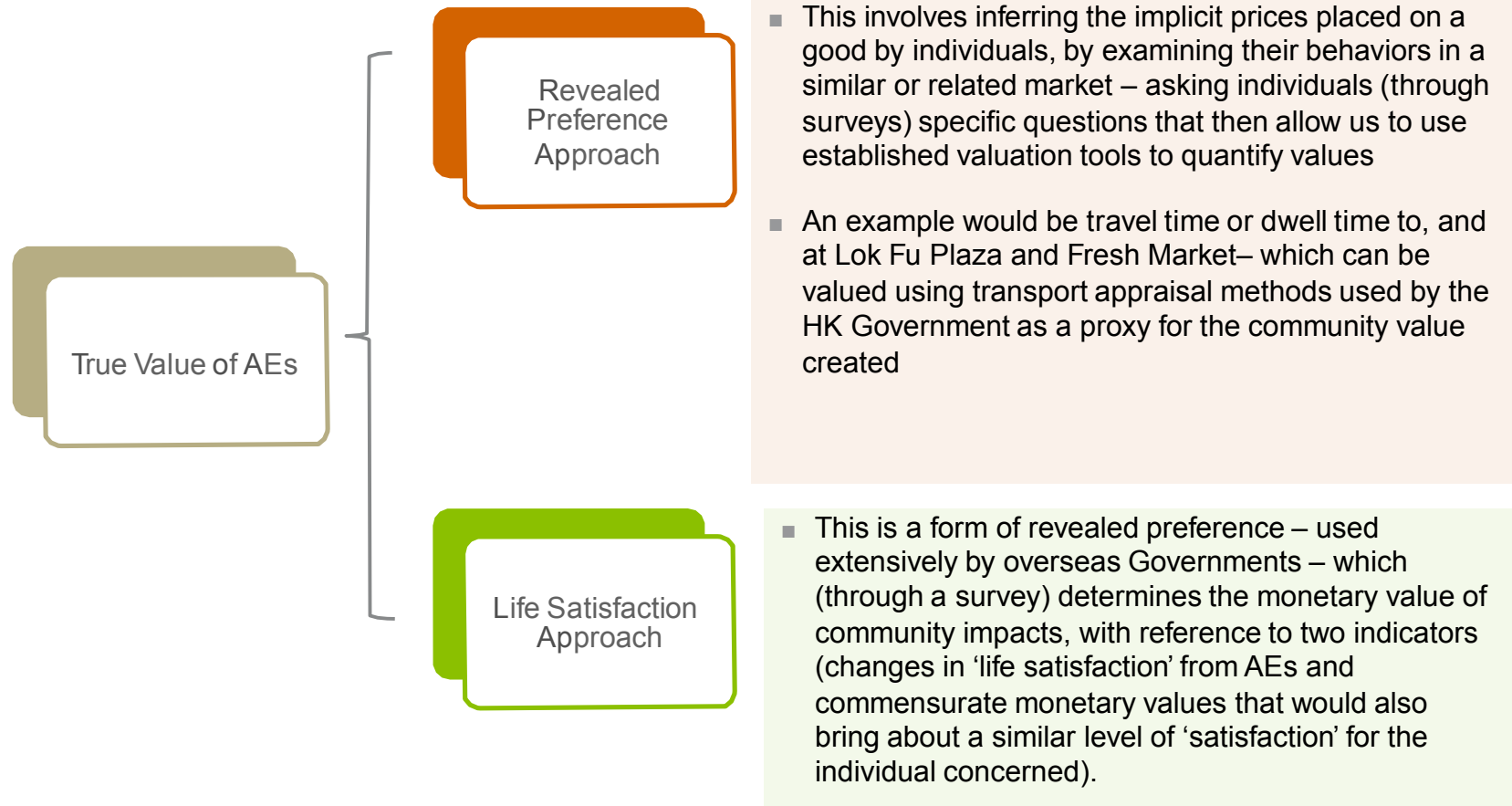
We commissioned KPMG Hong Kong to conduct a socio-economic impact assessment of our operations at Lok Fu based on KPMG's True Value methodology. The study considered economic value generated by our shopping centre, benefits to local government, economic impact on the community and perceived changes in community quality of life. The study found that every HK\$1.00 we invested in Lok Fu Plaza and Market, generates between HK\$2.10-\$4.10 and HK\$1.80-\$6.70 in annual socio-economic benefits, respectively.

A survey of shoppers and residents revealed that after asset enhancement:

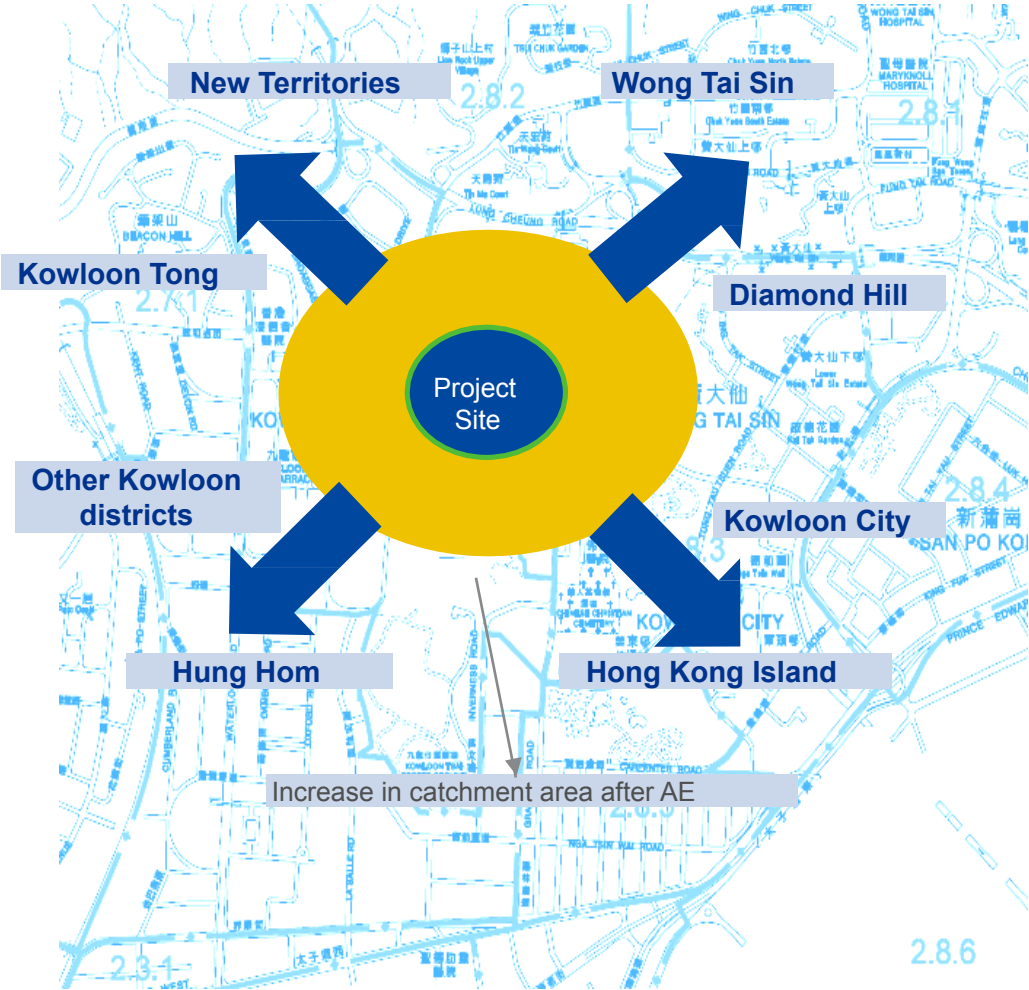
- Lok Fu catered to an expanded catchment area
- Nearby residents have a strong social dependence on the property, which now provides better public areas enabling social networking and community development
- Induced shoppers are from a younger demographic
- Shoppers are staying longer and spending more

The outcome of this initial study enable us to measure and understand the overall contribution of our shopping centres and allow us to identify priority areas for improvement in future asset enhancements. By quantifying our socio-economic impacts at Lok Fu we are establishing a platform to ensure that the communities we operate in increasingly benefit from our business operations. As a business that is committed to improving the lives of those around us, we will continue to develop this platform to demonstrate that The Link is a financially and socially responsible investment.

# Our assessment methodology

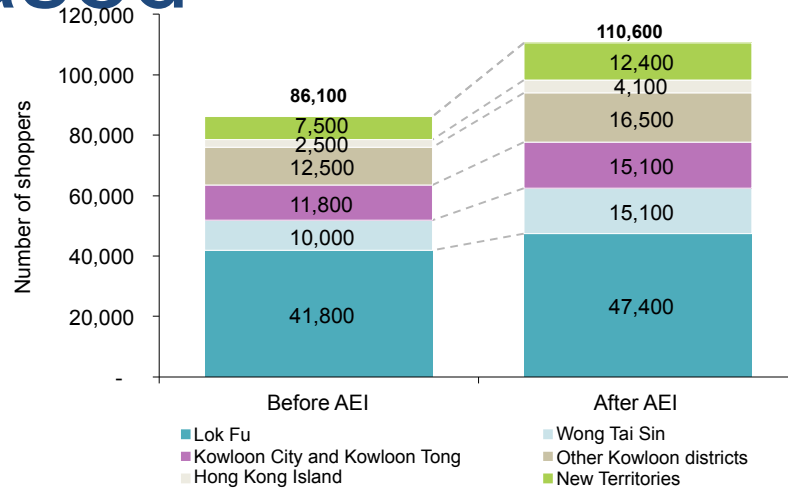


# Findings: Catchment area increased



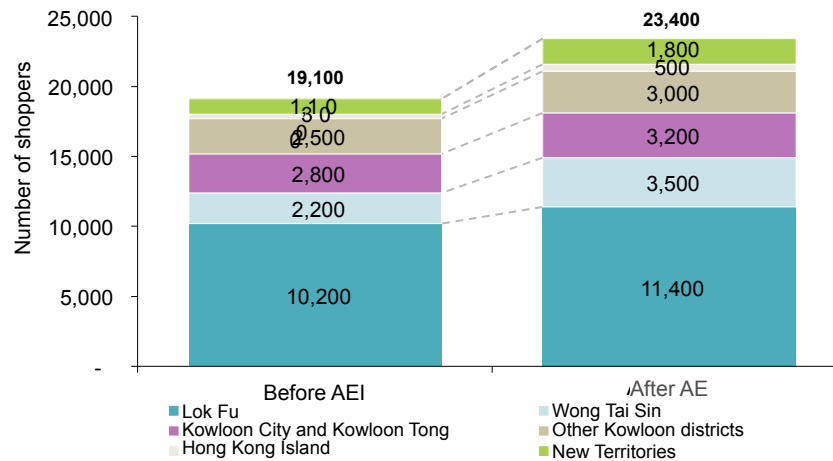
# Findings: Number of footfall increased

Number of shopping trips by districts, Lok Fu Plaza



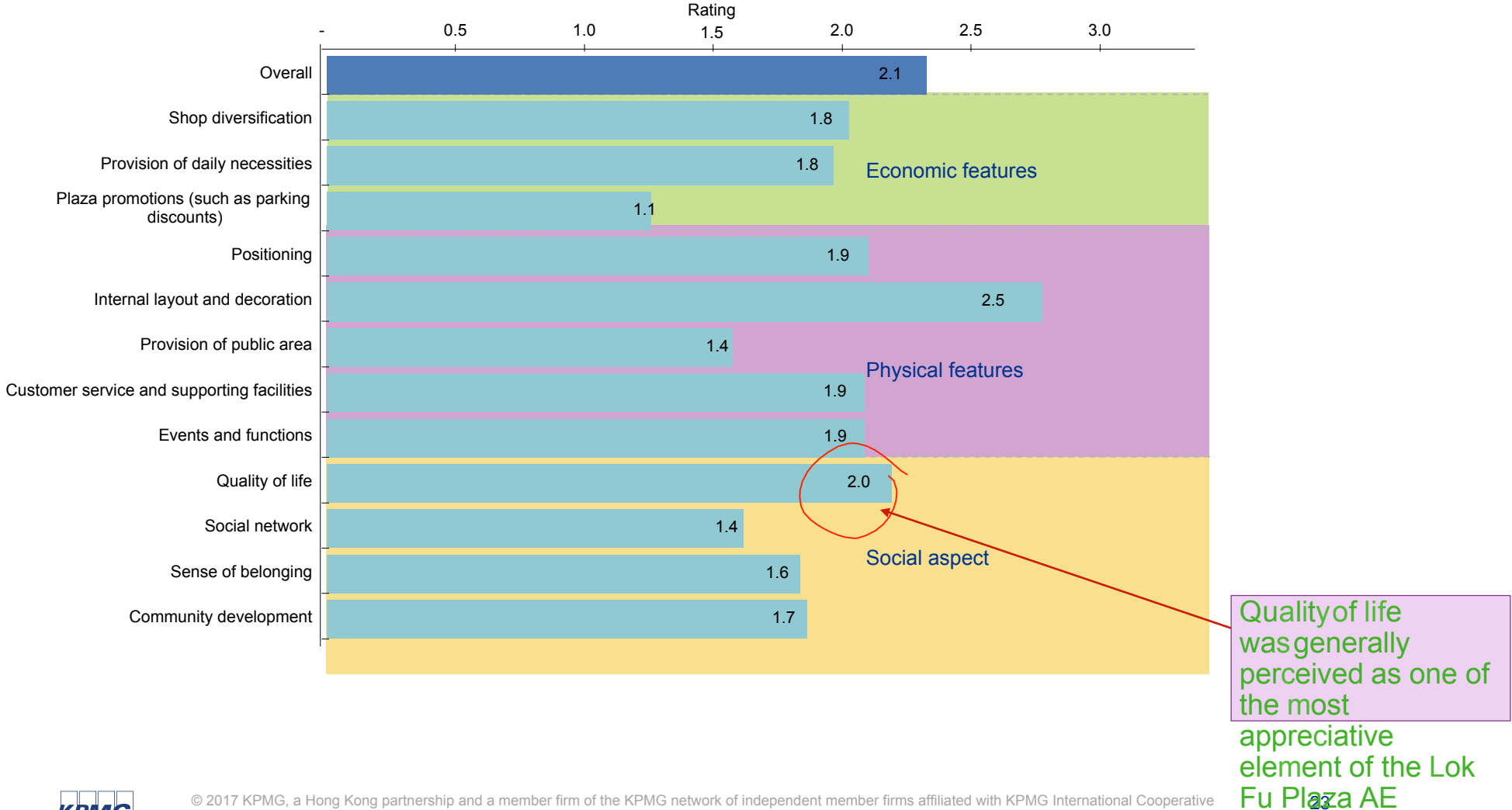
↑ No. of induced shopping trips + 29%

Number of shopping trips by districts, Lok Fu Fresh Market



↑ No. of induced shopping trips + 23%

# Life Satisfaction: Lok Fu Plaza after AE





Thank you