SUSTAINABLE DEVELOPMENT INVESTMENTS (SDIs) TAXONOMY & GUIDANCE

Includes separate section on covering negative contributions

December 2022

Available for subscribers and those interested in the SDI AOP (public information)

SDI ASSET OWNER PLATFORM

SUSTAINABLE DEVELOPMENT GOALS

TAXONOMY AND GUIDANCE

The present taxonomy and guidance is the foundation of the mapping of investments to the SDGs. This taxonomy is designed to be a reference point for capital markets practitioners. Users may interpret or select components depending on their mandates, policies, and the asset classes in their portfolio.

Further details at the industry and product category level (rules and product list) builds on this taxonomy & guidance and is available to subscribers to the SDI Asset Owner Platform. The SDI data available to subscribers supports application of the taxonomy covering products and services.

Based on feedback, we have added an separate section (as of page 62) on covering negative contributions to the Taxonomy to provide a more comprehensive picture.

The mission of the SDI-AOP is to help accelerate investments to deliver on the Sustainable Development Goals and thereby support investment outcomes for end beneficiaries.

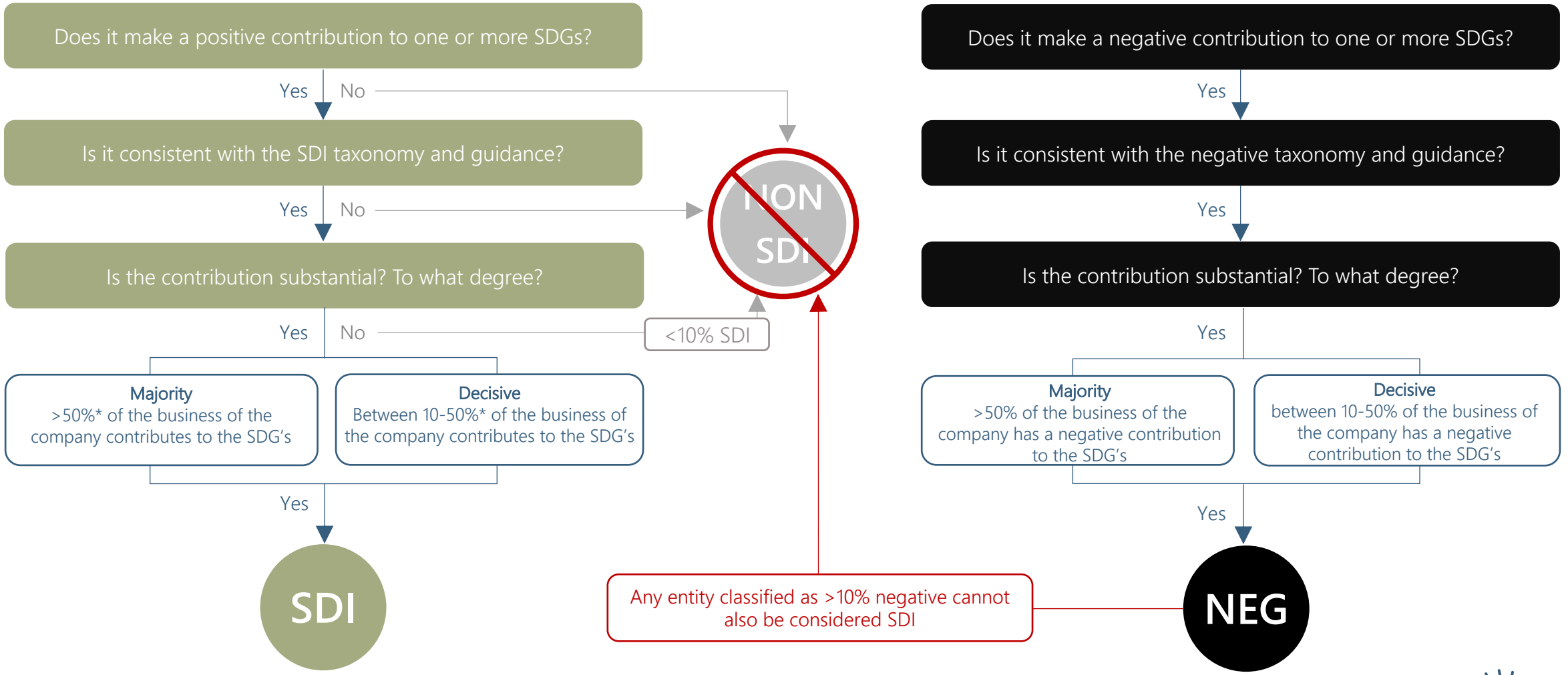
As asset owners, we are creating a community of investors who are jointly advancing the SDI AOP standard for investing into the SDGs.

We aspire to drive innovation in the investment industry with the standard being made available to all market participants for take-up.

GUIDING PRINCIPLES AND DEFINITIONS

1. The SDI classification focuses on companies' product and service-related contributions to the SDGs, and is based on **financial metrics**, most often revenues.
   - For some sectors, alternative metrics will be used where appropriate such as volumes of products or lending activity.
   - For some asset classes, users may choose to add alternative metrics include standards like the Global Real Estate Sustainability Benchmark, Green Bond Principles, etc.
   - While the SDI classification is on current financial data, future products will focus on forward looking metrics such as patents, capex and/or R&D expenditures.
2. Similar themes, products and services are brought together under the most pertinent SDG, for example, water services under SDG6 (water), not SDG9 (infrastructure)
3. For those SDGs where companies' contributions stem first and foremost from their operations or conduct (rather than products and services) users may develop SDG-specific indicators and references to capture these contributions by so-called Acknowledged Transformational Leaders (ATLs).
4. General ESG performance is out of scope, also with respect to ATLs. **ESG factors** will only be considered if
   - They imbed critical attributes of the final product or service (for example, FSC-certified biomass)
   - They could potentially undo the positive contribution. In those cases, 'ESG warning flags' are included in the report but do not affect the classification. This is to support integration in individual investors' investment processes.
5. The taxonomy identifies two types of warnings which are designed to help users balance the complexity of sustainable development issues:
   - × Activities that are no go for SDI due to being contrary to the SDGs
   - ! Activities that can be controversial
6. Companies with **intermediate products or services** in a supply chain may qualify as SDIs if these are (i) explicitly dedicated to the final product and associated SDG, and (ii) essential for the use of the final product. Or if possible, some degree of proportionality may be applied to reflect market share.
7. Continuous research will be conducted to maintain the SDI taxonomy as evolving performance standards, practices and regulations require the **regular re-assessment** of some products and services.
8. Some but not all product or service-related revenues can be segmented to underserved markets or people to address notions of affordability and equitability. We will invest in broadening the scope and also on measuring outcomes related to specific SDGs.
9. Negative contributions which are contrary to achieving the SDGs have also been added in a separate section. Similar metrics are applied as for the SDI classification. The negative aspects have deliberately been kept separate from SDI classification. This reflects the SDI AOP view that simple netting of positive and negative is often an oversimplification, especially when different SDGs are involved.
10. Products and services which are clearly dedicated or focused on negatively classified industries are also classified as negative as they primarily exist to support those industries.

SDI AND NEGATIVE DECISION TREES



* Percentage of business as determined by a relevant metric (e.g. revenue, capex etc)

SUSTAINABLE DEVELOPMENT GOALS



P Contribution through product & services (solutions)

O Contribution through operations & conduct

SUSTAINABLE DEVELOPMENT INVESTMENTS



SDI
ASSET
OWNER
PLATFORM

SUSTAINABLE DEVELOPMENT GOALS

SDG 1: NO POVERTY

End poverty in all its forms everywhere

Investable sub-goals

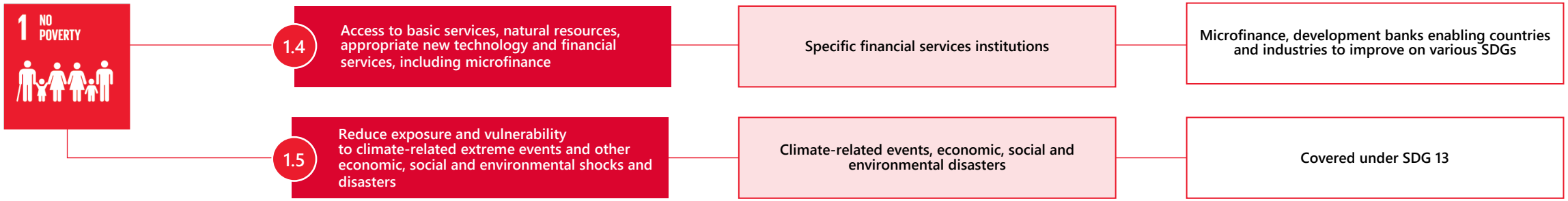
1.4 Ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance

1.5 Build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters



SDG 1: NO POVERTY

End poverty in all its forms everywhere



SDG 1: NO POVERTY

End poverty in all its forms everywhere



Guidance

1.4 Access to basic services, natural resources, appropriate new technology and financial services, including microfinance

Specific financial services institutions, microfinance and development banks:

- Financial service providers that aim specifically at access for the poor and vulnerable
- Development banks with a clear purpose to support countries and/or industries in their development and contribution to the SDGs

SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Investable sub-goals

- 2.1 Ensure access by all people to safe, nutritious and sufficient food all year round
- 2.2 End all forms of malnutrition and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons
- 2.3 Double the agricultural productivity and incomes of small-scale food producers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment
- 2.4 Ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production
- 2.5 Maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge



SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



2.1	Ensure access by all people to safe, nutritious and sufficient food	Nutritious food	Production of basic food, healthy food ingredients, healthy & natural foods
		Safe food	Food packaging, food testing
2.2	End malnutrition and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	Increase the quality of food for all	Natural food additives, healthy food, food testing equipment & services
2.3	Double the agricultural productivity and incomes of small scale food producers	Land conversion and development, land management/operations	Small scale farming technologies, support services
2.4	Sustainable food production systems and resilient agricultural practices that increase productivity and production	Production and Productivity	Sustainable and low-carbon agriculture, farmland
			Biological Fertilizer and crop protection materials, seeds
2.5	Maintain the genetic diversity of seeds, cultivated plants and farmed and domestic animals	Organic agriculture and food products	Organic farming, organic processing and retailing

SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Guidance

2.1 Access to safe, nutritious and sufficient food

Nutritious food

Investible entities that:

- produce basic food products (as defined by Choices International excluding meat, fish, poultry, tea, coffee, ready made meals, deep fried, foods, breakfast cereals containing high levels of sugar, spreads containing fat, all cheese, mixed salads, sandwiches, lunch meals and the likes and palm oil for food production).
- produce organic food products

Safe food

- Producers of packaging, testing, natural additives that contribute to food product safety

SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Guidance

2.2 End all forms of malnutrition

Increased quality of food

Investible entities that:

- produce healthier, more nutritious or natural food products
- produce healthy food ingredients (notably natural flavours, herbs, spices and substitutes for sugar from natural sources, sodium & fat)
- provide food quality testing services or certificates

× food supplements not contributing to basic nutritional needs (e.g. lifestyle products)

2.3 Double agricultural productivity of small scale food producers

Land conversion and development, land management/operations

Investible entities that:

- provide agricultural equipment or support services to small scale farmers

SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Guidance

2.4 Sustainable food production systems and resilient agricultural practices

Production and productivity

Farmland and investible entities that:

- increase the quantity of food produced in a resource-efficient way
- Increase productivity by using biobased agrochemicals
- increase crop productivity (e.g. improved seeds)
- increase animal productivity (e.g. medicines for healthier and more productive livestock)
- manufacture equipment, instruments and materials or provide agricultural support services for resource-efficient farming (e.g. high precision farming techniques, IT)

× production of beef as the most resource-inefficient animal protein (with exception of grass-fed beef for its lower conversion rate)

! Genetically modified/edited seeds are highly controversial

! Overly aggressive protection of patented seeds and market consolidation may harm farmer interests

! Excessive use of anti-biotics may harm animal health and lead to resistance

SDG 2: ZERO HUNGER

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



Guidance

2.5

Maintain genetic diversity

Investable entities that:

- practice organic farming, or process or retail organic food
- provide products and services that focus on maintaining genetic diversity

SDG 3: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

Investable sub-goals

- **3.1** Reduce the global maternal mortality ratio
- **3.2** End preventable deaths of newborns and children under 5 years of age
- **3.3** End the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- **3.4** Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being
- **3.7** Ensure universal access to sexual and reproductive health-care services, including for family planning, information and education
- **3.8** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
- **3.b** Research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines



SDG 3: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



3.1 Reduce the global maternal mortality ratio 3.2 End preventable deaths of newborns and children under 5 years of age;	Access to maternal care and care for children under 5 years	Prevention, access to quality care by skilled health providers, diagnostics, access to contraception and access to medicine and treatment during pregnancy
3.3 Communicable diseases: End the epidemics of AIDS, tuberculosis,malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases; 3.4 Non-Communicable diseases: reduce by one third premature mortality from non-communicable diseases and promote mental health and well-being	Communicable and Non-communicable diseases	Prevention (including vaccines), access to quality care by skilled health providers, diagnostics, medicines and treatment for NCD and CD.
	Mental health and well-being	Diagnostics, treatment of mental disorders, substance abuse and improving quality of life (incl. non-invasive diagnostics and treatment, prostheses, hearing devices)
3.7 Ensure universal access to sexual and reproductive health-care services	Family planning	Contraceptives, fertility treatment information and education
3.8 Achieve universal health coverage, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all 3.b Research and development of vaccines and medicines, provide access to affordable essential medicines and vaccines	(R&D of) vaccines and medicines	R&D facilities and services for vaccines and medicines
		Diagnostics, medical equipment, services, health care delivery systems (IT)
	Health care equipment and services	Personal health tech diagnostics, preventive healthcare
		Affordable hospitals, and clinics, health care facilities[1]
		Affordable health care coverage and financial services
		Personal protective devices and equipment

1. Covered under SDG 9

SDG 3: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



Guidance

3.1 Reduce the global maternal mortality ratio

3.2 End preventable deaths of newborns and children under 5 years of age

Investible entities that:

- provide access to maternal care, diagnostics, medicines or treatment relating to maternal disorders (such as high blood pressure, blood-poisoning or infections during pregnancy, bleeding after childbirth)
- provide health care to prevent and manage preterm births
- provide health care for ill and small newborn babies, including management of severe infections
- provide access to vaccines and/or treatment of, in particular, diarrhea and lower respiratory diseases (such as pneumonia)
- provide access to solutions for nutritional deficiencies

SDG 3: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



Guidance

3.3 Communicable diseases – end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

3.4 Non-communicable diseases – reduce by one third premature mortality from non-communicable diseases and promote mental health and well-being

Communicable and non-communicable diseases

Investible entities that:

- provide access to prevention (incl. vaccines), diagnosis, treatment, medicine and breakthrough innovation for communicable diseases in particular AIDS, tuberculosis, malaria, neglected diseases, hepatitis, water borne diseases
- provide diagnostics, medicine and treatment for non-communicable diseases relating to neoplasms (cancer), cardiovascular diseases, diabetes, neurological disorders, chronic respiratory diseases, cirrhosis and other chronic liver diseases, digestive diseases, urogenital, blood and endocrine diseases, and musculoskeletal disorders
- provide increased access to generic medicine

Mental and Substance use disorders

Providers of diagnostics, medicine and treatment for mental and substance use disorders such as depression, anxiety and substance abuse

Well-being

Providers of products and services that substantially improve the quality of life of patients and the elderly, incl. non-invasive diagnostics and treatment, prostheses, hearing devices

SDG 3: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



Guidance

3.7 Ensure universal access to sexual and reproductive health-care services

Investible entities that:

- provide access to sexual and reproductive health-care services (family planning, education)
- provide contraceptives

3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all

Investible entities that:

- provide transport services (e.g. ambulance)
- provide employment services for health care personnel
- provide consulting services to the sector that are intended to improve health care services (excluding administrative services).

3.b Research and development of vaccines and medicines, provide access to affordable essential medicines and vaccines

Healthcare services

Investible entities that:

- provide affordable access to quality essential health-care services (e.g. public hospitals, affordable private clinics)
- produce medical equipment or provide services for more immediate and more accurate diagnoses and treatment
- produce equipment or software (incl. IT) for more efficient health care delivery systems
- provide personal protective devices and equipment (e.g. gloves)
- provide key preventive health care services (incl. sports and sports-related products and services)
- provide clinical nutrition and/or highly specialized diets for medical purposes

SDG 3: GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages



Guidance

3.b Research and development of vaccines and medicines, provide access to affordable essential medicines and vaccines (continued)

R&D of vaccines and medicines

Investible entities that:

- provide R&D services and facilities
- provide access to affordable essential medicines and vaccines

× Not luxury private healthcare and wellness facilities

! Providers of care, diagnostics, treatment or medicine that increase prices to a level much higher than is considered reasonable or fair

! Pharma pricing practices and interference with government healthcare policy can be controversial

! Healthcare/pharma companies must be assessed for the alignment between company strategy and access to affordable health care

! Some pharma companies reformulate existing patents leads to no added benefit other than the extension of patent rights

SDG 4: QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities

Investable sub-goals

- **4.1** Ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- **4.2** Ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- **4.3** Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- **4.4** Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- **4.5** Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- **4.6** Ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- **4.a** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all



SDG 4: QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities



4.1, 4.6	Free primary and secondary education, literacy and numeracy youth & adults	Primary & secondary education products and services	Software, educational publications and materials
4.2	Access to early education	Early education and pre-school products and services	Provision of pre-school education and related facilities, early learning publications and materials/educational toys
4.3, 4.4, 4.5	Gender, vulnerable and disabled equal access, affordable tertiary and vocational education	Vocational education products and services	Provision of education and related facilities, software, educational publications and materials and research
		Finance for access to education	Microfinance funds and affordable finance/loans/credits
4.a	Build and upgrade educational facilities	Real Estate & infrastructure related to education	Schools, universities, (physical buildings), also refurbishment of such facilities[1]

1. Covered under SDG 9

SDG 4: QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities



Guidance

4.1 4.6

Free primary and secondary education

Providers of equitable and quality access to educational materials and services (software etc.)

4.2

Access to early education

Providers of quality access to pre-school educational materials and services

4.3 4.4 4.5

Access to affordable tertiary and vocational education

Investible entities that:

- provide gender, vulnerable and disabled equal access to affordable tertiary and vocational education
- provide education loans to small and medium-scale enterprises or underserved people
- provide research (at universities)

× Not high-end, restricted access services if lower-end alternatives exist (e.g. no private schools with high entrance fees)

! Beware of predatory student recruiting and lending, as well as poor value of diplomas

SDG 5: GENDER EQUALITY

Achieve gender equality and empower all women and girls

Users may identify Acknowledged Transformational Leaders whose contribution through operations and/or conduct classifies as SDI



SDG 6: CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

Investable sub-goals

- **6.1** Access to safe and affordable drinking water for all
- **6.2** Access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
- **6.3** Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally
- **6.4** Substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity



SDG 6: CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all



6.1 Access to safe and affordable drinking water	Water supply & distribution	Network construction, maintenance, equipment
6.2 Access to adequate and equitable sanitation and hygiene	Wastewater discharge	Network construction & maintenance
	Basic hygiene and sanitation	Toilets, hygiene products
6.3 Improve water quality	Water treatment	Network construction, maintenance, equipment, desalinization
	Water testing	Laboratory equipment & services
6.4 Increase water-use efficiency and reduce the number of people suffering from water scarcity	Water quantity	Water saving systems, technologies and water metering
	Water storage	Storage infra, storage tanks[1]

1. Covered under SDG 13

SDG 6: CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all



Guidance

6.1 Access to safe and affordable drinking water

Investible entities that:

- design, construct, maintain or operate infrastructure for water storage, treatment, supply or distribution
- manufacture equipment or materials for water supply or distribution
- provide services for water supply or distribution

× Not bottled water

6.2 Access to sanitation

Investible entities that:

- manufacture and install toilets and sanitary facilities
- produce sanitary products with a focus on women and girls in vulnerable situations

× Not luxury personal hygiene products and cosmetics

SDG 6: CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all



Guidance

6.3 Improve water quality

Investible entities that:

- design, construct, maintain or operate infrastructure for wastewater management
- manufacture equipment or materials for waste water treatment or water desalinization
- manufacture water testing equipment or provide water quality testing services

6.4 Increase quantity of water

Producers of equipment (incl. meters) or materials that support higher water use efficiency

SDG 7: AFFORDABLE CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all

Investable sub-goals

- 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services
- 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix
- 7.3 By 2030, double the global rate of improvement in energy efficiency



SDG 7: AFFORDABLE CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



7.1 Ensure access to affordable, reliable and modern energy services.	Energy infrastructure[1]		
7.2 Increase share of renewable energy	Renewable energy	Electricity and/or heat generated from wind, solar, biomass, geothermal, hydro, nuclear fusion and/or tidal sources	
	Alternative fuels	Hydrogen, fuel cells and advanced biofuels	
	Supporting products and services	Renewable technology suppliers, enzyme suppliers, critical minerals producers	
7.3 Double the global rate of improvement in energy efficiency	Built environment	Metering, insulation	
	Efficient lighting	LED lights, efficient lighting service providers	
	Industrial production	Efficient production tools, resource management systems	
	Energy efficient transport	Fuel use reduction	

1. Covered under SDG 9

SDG 7: AFFORDABLE CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Guidance

7.2 Increase substantially the share of renewable energy in the global energy mix

Renewable energy

- Generators of electricity and/or heat generated from wind, solar, biomass, geothermal, hydro, and/or tidal sources;
- Transmission & Distribution focused utilities which are providing access to electricity markets which are already >80% renewables or are increasing renewables-based generation (by >1% pa over 3 year average.

! Additional scrutiny may be required to consider the impacts of nuclear power

! Large scale hydro power projects (>25MW) could have significant adverse impacts on biodiversity and local communities.

! Scrutinise Biomass sourcing: Biomass should be sustainability certified and not directly compete with food production

Alternative fuels

- Producers of alternative fuel technologies including hydrogen, nuclear fusion and advanced biofuels

! Concerns around biofuels should be properly addressed: biofuels should be cleaner than the fossil fuels they replace, should not compete with food production (e.g. biofuels produced from waste materials) and should not be grown in/near protected or contested areas

Supporting products and services

Investible entities that:

- Provide products and services for renewable energy generation (e.g. technology, enzymes)
- Provide products or services for storage of renewable energy (e.g. fuel cells, hydrogen, batteries)
- Provide critical minerals that are essential for delivering a low carbon energy transition, (e.g. Lithium, Nickel, Cobalt, Rare earths, Graphite, Manganese, Silicon, Aluminum)

× Not batteries for consumer electronics

! Additional scrutiny should be applied around companies mining critical minerals.

SDG 7: AFFORDABLE CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all



Guidance

7.3 Double the global rate of improvement in energy efficiency

Built environment

Providers of products and services dedicated to improved energy efficiency in buildings (e.g. insulation, smart metering, smart thermostats, energy use monitoring devices)

Efficient lighting

Providers of products and services for substantial increases in lighting efficiency (e.g. LED)

Industrial production

Providers of products and services for substantial increases in industrial energy efficiency (production tools, catalysts, resource management systems, design software etc.)

Energy efficient transport

Investible entities that:

- Provide of products and services for substantial increases in fuel efficiency
- Manufacture pure battery electric vehicles, or alternative fuel vehicles (e.g. hydrogen)

SDG 8: DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Users may identify Acknowledged Transformational Leaders whose contribution through operations and/or conduct classifies as SDI



SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Investable sub-goals

- 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
- 9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
- 9.4 Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes



SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



9.1 Sustainable & resilient infrastructure	Transportation infra	Public transportation and sustainable logistics
	Social infra	Schools, hospitals (buildings only)[1]
	Water infra	Clean drinking water, distribution networks and wastewater treatment[2]
	Waste infra	Waste collection infra, waste treatment facilities
	Communications infra	Networks, antenna towers, fiber cables
	Energy infra	Transmission and distribution of renewable energy and alternative fuels[3]
9.3 Access of small-scale enterprises to financial services	Financial services in particular in developing countries	Microfinance, Electronic payment systems, other SME financial services
9.4 Upgrade infrastructure and retrofit industries to make them sustainable	Resource efficiency	Recycling, carbon capture, utilization and storage. Energy efficiency, reduced fuel consumption, [4]

1. Housing covered under SDG11
2. Covered under SDG 6
3. See SDG7 for renewable energy generation & utilities
4. Energy and fuel efficiency covered under SDG7

SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Guidance

9.1 Sustainable & Resilient infrastructure

Transportation infra

Investible entities that:

- construct or operate public transportation infrastructure (train, metro, ferry) with a focus on affordable and equitable access for all
- construct or operate roads, ports, e.g. in highly undeveloped regions

Social infra

Investible entities that:

- construct or operate schools, hospitals

Waste infra

Investible entities that:

- construct or operate waste collection infrastructure and waste treatment facilities that are aimed at improving resource efficiency (reduce, reuse, recycling)

Communications infra

Investible entities that:

- construct or operate networks, antenna towers, fiber cables, internet providers with a focus on affordable and equitable access for all, especially for connecting the unconnected in disadvantaged areas.

SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Guidance

9.1 Sustainable & Resilient infrastructure (continued)

Energy infra

Investible entities that:

- transmit and distribute electricity with a focus on affordable and equitable access
- transmit and distribute electricity generated from renewable sources (e.g. wind farm power cables) or provide access to electricity markets which are already >80% renewables or are increasing renewables-based generation (by >1% pa over 3 year average)
- provide equipment or services for smart grids, local storage, behind the meter energy storage, energy transition infrastructure (e.g. grid improvements) and electrical transportation (e.g. EV charging stations)
- distribute alternative fuels (including hydrogen, fuel cells and advanced biofuels)

× Not transmission and distribution driving the expansion of coal capacity, see SDG7.

9.3 Access of small-scale enterprises to financial services in particular in developing countries

Investible entities that:

- provide loans are provided to small and medium-scale enterprises
- provide electronic payment systems and other financial services enabling small and medium-scale enterprises to access the traditional finance sector

! Additional scrutiny on high risk and predatory lending practices may be warranted

SDG 9: INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Guidance

9.4 Upgrade infrastructure and retrofit industries to make them sustainable

Resource efficiency

Investible entities that:

- provide equipment and services that increase resource and energy efficiency (see also SDG 7 and SDG 12)
- provide equipment and services for recycling and utilization of waste and by-products
- supply recycled materials
- provide equipment and services for Carbon Capture, Utilization and Storage

SDG 10: REDUCE INEQUALITIES

Reduce inequality within and among countries

Users may identify Acknowledged Transformational Leaders whose contribution through operations and/or conduct classifies as SDI



SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

Investable sub-goals

- 11.1 Ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums
- 11.2 Provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport
- 11.5 Significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations
- 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management



SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable



11.1	Access to safe and affordable housing and basic services	Affordable housing	Public / private partnerships to build (social) housing, Student housing, Sustainable property – e.g. GRESB 4-5 stars real estate
		Safe housing	Development, renovation, reinforcement of houses
		Basic services	Access to waste collection, electricity, etc.[1]
11.2	Access to safe, affordable and sustainable transport systems	Sustainable transportation systems	Public transport, rail infra, transport sharing[2]
		Improving road safety	Traffic management systems, vision & sensor systems, airbags
11.5	Reduce impact of disasters	Reduce human impact	Emergency packs, survival kits, shelter tents
		Reduce economic losses	Catastrophe (re)insurance, catbonds
		Upgrade adaptation measures	Flood protection, dams[3]
11.6	Reduce adverse per capita environmental impact of cities	Waste management	Recycling
		Air quality	Industrial emissions, Sustainable transport, EV infra
		Transport substitutes	Virtualization, videoconferencing

1. Covered under SDG6, SDG7 and SDG9
2. Transport infrastructure covered under SDG9
3. Covered under SDG13

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable



Guidance

11.1

Access to safe and affordable housing and basic services

Affordable housing

Investible entities that:

- Build or operate social housing, student housing, senior housing with a focus on inclusive, affordable and equitable access

× Not luxury retirement homes

Safe housing

Investible entities that:

- upgrade/adapt existing housing to address health & safety considerations/regulatory requirements (e.g. asbestos removal, fire safety systems)
- provide services that increase availability of social housing (e.g. soil remediation for new development)

× Not security systems for gated communities or other non-essential structures (e.g. sports facilities, swimming pools)

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable



Guidance

11.2

Access to safe, affordable, accessible and sustainable transport systems

Sustainable transportation systems

Investible entities that:

- provide equipment or services for public transport

× Not: airplanes, taxi companies

! Controversies exist around sharing schemes

Improving road safety

Investible entities that:

- provide products and services to improve road safety (e.g. vision & sensor systems, traffic management systems)

! Many improvements become standard components (e.g. airbags)

11.5

Reduce impact of disasters

Reduce human impact

Investible entities that:

- provide disaster relief products and services (e.g. emergency packs, survival kits, medical equipment), short-term and emergency housing in response to natural disasters/conflicts (e.g. containers, shelter tents)

Reduce economic losses

Investible entities that:

- provide financial products and services for disaster relief after earthquakes, floods, hurricanes or conflicts (e.g. catastrophe insurance)

SDG 11: SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable



Guidance

11.6 Reduce adverse per capita environmental impact of cities

Air quality

Investible entities that:

- provide products and services for air pollution control (e.g. filters for industrial or vehicle exhaust emissions)

Transport substitutes

Investible entities that:

- provide products and services that offer alternatives for transport (e.g. virtualisation, video-conferencing)

SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

Investable sub-goals

- 12.2 Achieve the sustainable management and efficient use of natural resources
- 12.3 Halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses
- 12.4 Achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment
- 12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse



SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



12.3 Reduce food waste	Post harvest	Equipment for improved logistics (cold chain), ingredients (enzymes) and packaging for spoilage prevention
12.4 Management of chemicals and wastes throughout their life cycle and reduce the release into the environment	Emission reduction equipment	Filters, emission control
	Sustainable substitutes	Biochemicals
12.2 Sustainable management and efficient use of natural resources and 12.5 Reduce waste and waste generation	Prevention	Waste management, design, sharing economy
	Reduction	Process improvements
	Recycling and reuse	Recycling operations

SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



Guidance

12.3

Reduce food waste

Post-harvest

Investible entities that:

- produce ingredients and enzymes that prevent or delay food spoilage
- build or operate storage facilities
- manufacture equipment for improved logistics, incl. cold chain
- produce packaging materials for upholding freshness and nutritional quality of food products

Management of chemicals and all wastes throughout their life cycle and reduce the into the environment

12.4

Emission reduction equipment

- Producers of filters, process software, catalysts specifically targeting emission control

Sustainable substitutes of chemicals

- Producers of biochemicals that provide safe and environmentally sound alternatives
- × Not: synthetic or biochemicals when natural alternatives exist

SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns



Guidance

12.2 **Sustainable management and efficient use of natural resources**

12.5 **Reduce waste generation**

Prevention, reduction, recycling/reuse

Investable entities that:

- provide products and services for prevention, reuse, recycling of waste (e.g. product design, waste management, and materials recovery)
- provide products and services for the 'sharing economy' that reduce the need for natural resources
- provide products and services for process improvements contributing to reducing waste

SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts

Investable sub-goals

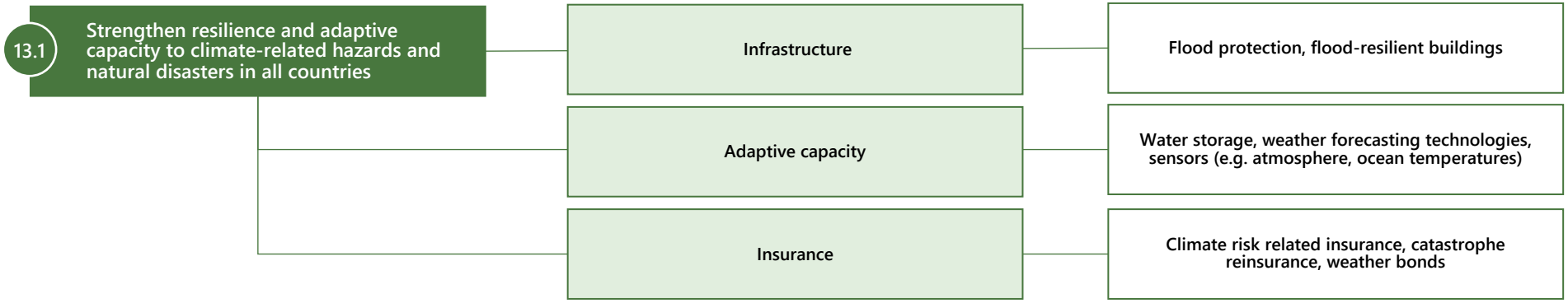
- **13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
- **13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- **13.b** Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities



SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts





SDG 13: CLIMATE ACTION

Take urgent action to combat climate change and its impacts



Guidance

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Infrastructure

Investable entities that:

- Build or operate infrastructure offering protection to climate-related hazards (e.g. flood protection dams and dikes, flood-resilient buildings)

! Beware of infrastructure that are harmful to the natural environment or energy-inefficient

Adaptive capacity

Investable entities that:

- Build or operate water storage infrastructure
- Provide weather forecasting services and technologies (e.g. sensors)
- Provide equipment and services for natural disaster warning systems
- Produce products and services for climate adaptation (e.g. fire retardant materials)

Insurance

- Climate risk related insurance, catastrophe reinsurance, weather bonds

SDG 14: LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Investable sub-goals

14.1 Prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

14.2 Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans



SDG 14: LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development



14.1 Prevent and significantly reduce marine pollution of all kinds	Marine products, services and equipment providers	marine operation services, moorings and aids to navigation, subsea services, ecological surveys and lab testing, oil spill response
	Water pollution prevention	Technologies, systems and projects aiming to reduce water pollution (e.g. wastewater treatment)
14.2 Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts	Sustainable fishing	Products, services and equipment providers of sustainable fishing technologies

SDG 14: LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development



Guidance

14.1 Prevent and significantly reduce marine pollution of all kinds

Marine products, services and equipment providers

Investible entities that:

- provide products and services with focus on reducing marine pollution (e.g. marine operation services, moorings and aids to navigation, subsea services, ecological surveys and lab testing, oil spill response)

Water pollution prevention

Investible entities that:

- provide products and services with focus on preventing water pollution (through agricultural run-off, discharge of nutrients and pesticides, untreated sewage)

14.2 Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts

Sustainable fishing

Investible entities that:

- provide products and services with focus on sustainable fishing (e.g. surveillance equipment, sustainable fishing technologies, nets for lower by-catch, certification)
- provide products and services for fish farming in ponds or indoor basins

! Beware of trawlers for indiscriminate industrial fishing.

! Fish farming or aquaculture with open connection to open sea is controversial

SDG 15: LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss

Investable sub-goals

- **15.2** Promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally
- **15.3** Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
- **15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species



SDG 15: LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss



15.2 Sustainable management of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation	Sustainably managed forests	Natural and production forests (e.g. FSC or SFI certified)
	Afforestation and reforestation projects	Forest development, e.g. REDD+ projects
15.3 Combat desertification, restore degraded land and soil	Degraded land restoration	Regenerative agriculture on marginal lands
	Prevent land degradation	Sustainable agriculture, forestry and grazing
15.5 Reduce degradation of natural habitats, halt the loss of biodiversity and protect and prevent extinction of threatened species	Reduce degradation of natural habitats	Nature conservation projects
	Halt the loss of biodiversity and extinction of threatened species	Wildlife conservation projects, biological pesticides, ecotourism
	Restoration finance	Finance for carbon, biodiversity, river or wetlands restoration

SDG 15: LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss



Guidance

15.2 Sustainable management of forests, halt deforestation, restore degraded forests and increase afforestation and reforestation

Sustainably managed forests

- Managers of natural forests and production forests (timberland) if certified by FSC, SFI or PEFC

Afforestation and reforestation projects

- Managers of forest development and REDD+ projects if certified by FSC, SFI or PEFC

15.3 Combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods

Combat desertification

- Providers of technologies and services that focus on preventing land degradation (e.g. halt overgrazing and deforestation)

Degraded land restoration

- Providers of sustainable agriculture, forestry and grazing on marginal lands (e.g. Land Degradation Neutrality investments)

SDG 15: LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss



Guidance

15.5 **Reduce the degradation of natural habitats, halt the loss of biodiversity and protect and prevent the extinction of threatened species**

Reduce degradation of natural habitats

- Projects and financing to reduce degradation of natural habitats (e.g. nature conservation projects)

Halt the loss of biodiversity and extinction of threatened species

- Projects and financing to halt the loss of biodiversity (e.g. eco-tourism, biodiversity enterprise funds, organic pesticides, wildlife conservation projects)

Restoration finance

- Finance for restoration of ecosystems (e.g. green bonds for restoration of land, biodiversity, rivers, wetlands)

SDG 16: PEACE AND JUSTICE STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Users may identify Acknowledged Transformational Leaders whose contribution through operations and/or conduct classifies as SDI



SDG 17: PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Users may identify Acknowledged Transformational Leaders whose contribution through operations and/or conduct classifies as SDI



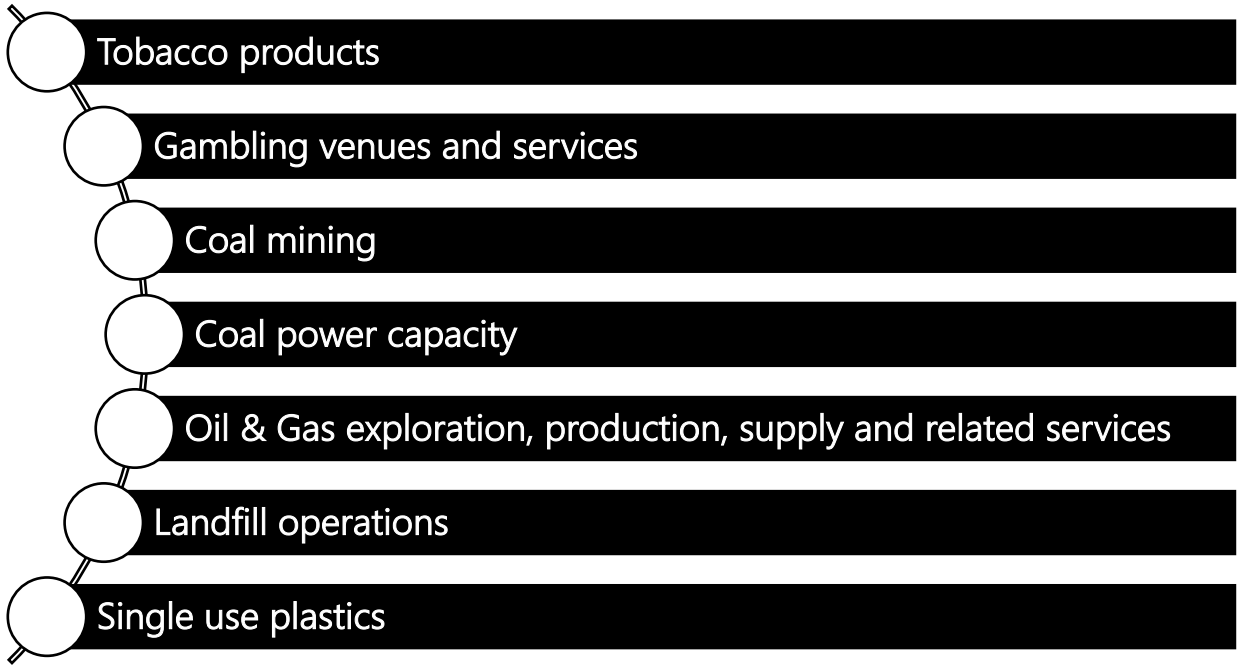
NEGATIVE CONTRIBUTIONS

SDI
ASSET
OWNER
PLATFORM

SUSTAINABLE DEVELOPMENT GOALS

NEGATIVE CONTRIBUTIONS

Negative contributions which are contrary to achieving the SDGs have been added to the SDI AOP Taxonomy. Similar metrics are applied as for the SDI classification. Negative contributions are not netted off against positive, as the SDI AOP does not believe that this approach reflects the complexity and interrelatedness of the SDGs. Entities with over 10% negative revenues cannot be considered SDI .



NEGATIVE SDG 3: GOOD HEALTH AND WELL-BEING

Tobacco products

Impacted sub-goal

3.4 Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

Negative contribution to mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease



NEGATIVE SDG 3: GOOD HEALTH AND WELL-BEING

Gambling venues and services

Impacted sub-goal

3.4 Reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

↓

Negative contribution to mental health and well-being



NEGATIVE SDG 7: AFFORDABLE CLEAN ENERGY

Coal mining

Impacted sub-goal

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Negative contribution to renewable energy share in the total final energy consumption



NEGATIVE SDG 7: AFFORDABLE CLEAN ENERGY

Coal power capacity

Impacted sub-goal

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Negative contribution to renewable energy share in the total final energy consumption



NEGATIVE SDG 7: AFFORDABLE CLEAN ENERGY

Oil & Gas exploration, production, supply and related services

Impacted sub-goal

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

Negative contribution to renewable energy share in the total final energy consumption



SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Single use plastics

Impacted sub-goal

12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse

↓

Negative contribution to reducing waste generation

Additional impacted sub-goal

14.1 Prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

↓

Negative contribution to marine plastic debris density



SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

Landfill operations

Impacted sub-goal

12.5 Substantially reduce waste generation through prevention, reduction, recycling and reuse

↓

Negative contribution to recycling rates



DISCLAIMER

This document is intended only to provide information to the user and its content is not intended for commercial use. The information on the website is made available "as is", it may be that the information is incomplete or incorrect or in violation of the law. SDI AOP does not accept any liability for this.

Any copying (other than in the context of downloading), reproduction, duplication, forwarding, distribution, publication or making available to third parties the material for a fee, in a way that is contrary to the purpose of the website is prohibited without the express written permission from SDI AOP.

SDI AOP does not in any way or form accept any liability for damage resulting from or related to the use (or the impossibility of use), the reliance on (or the omission of) actions in response to the information. The document does not provide advice, the reader itself is responsible to ensure that the information is suitable for its purpose of use.