

2. Value Creation Rating (VCr): A Primer

2.1 The SVC Measurements: From Conceptualization to Operationalization

Sustainable Value Creation (SVC) is a framework that aligns financial performance and risk origination with the long-term sustainability of a business to revolutionize the decision-making processes of leaders. It is a uniquely comprehensive approach to double materiality that connects a firm's creation of value and optimization of profit with its impact on stakeholders including customers, suppliers, capital providers, employees, regulators, nature, and academic and research institutions (see [Visual 2.1](#)). It uses two key measurements; the comprehensive Value Creation Rating (VCr) and the simpler more intuitive Value Creation Position (VCp) to provide managers, investors, and policymakers with practical tools to weigh their present profits and risk origination against long-term value creation and risk management.

This chapter, which expands on its equivalent in the VCr2024 pilot report, discusses the conceptual foundations that underlie sustainable value creation and moves on to explain how it is operationalized. The measurements, the framework's architecture, its core components, and the methodologies used to assess value creation and extractive value transfers at the firm level as they affect stakeholders are fully expounded upon. This understanding is critical in identifying the opportunities and challenges that firms and industrial sectors face as they strive for both positive sustainable profits and impacts. This discussion sets the scene for the results of this proof-of-concept report that are set out in Chapter 3.

The aims of *The Sustainable Value Creation of Firms* project are presented in the introductory chapter of this report, as is the need to establish sustainability measurements based on the dualism of value creation vs value transfers. In this regard, the primary SVC measurement that this report focuses on is the comprehensive Value Creation Rating (VCr). The Value Creation Position (VCp) measurement offers a simpler insight into the sustainability of a firm's business model through a differentiated lens that focuses on ascertaining its extractive value transfer activities. Both measurements fully incorporate the many stakeholder and shareholder relationships of a firm to the extent allowed by the availability of data needed to produce SVC Metrics. As a consequence, the two measurements incorporate institutional and political economy perspectives in a way that no other current sustainability, ESG, or CSR assessments or ratings are able to. Before the VCr and VCp are discussed in detail, their main differences are comparatively explained in [Visual 2.6](#).

The comprehensive VCr is the sustainability measurement that assesses the proportion of value creation and value extraction in a firm's business model

The simpler VCp is the sustainability measurement that assesses extractive value transfers in relation to a firm's revenue

Visual 2.1: Value co-creation stakeholders of the firm (Source: list compiled with recommendations from ChatGPT; categorization is the editors' own)

	Stakeholder	Type	Details & Examples
1	Banks, public lenders	Capital providers (debt)	Revolving credit, term loans
2	Bondholders	Capital providers (debt)	Public debt
3	Private lenders	Capital providers (debt)	Non-public loans, direct lenders, non-bank lenders
4	Banks (as investors)	Capital providers (equity, financial investors)	Investment banking arm
5	Pension funds (as investors)	Capital providers (equity, financial investors)	Institutional investors
6	Sovereign wealth funds	Capital providers (equity, financial investors)	Institutional investors
7	Private equity & venture capital firms	Capital providers (equity, financial investors)	Direct owners, growth capital
8	Shareholders	Capital providers (equity, strategic owners)	Individuals, family offices, funds, VCs
9	Founders / entrepreneurs	Capital providers (equity, strategic owners)	Company founders
10	Tax authorities	Capital providers (public)	National & local revenue agencies
11	Subsidy granting agencies	Capital providers (public)	Official funding sources
12	Export credit agencies / DFIs	Capital providers (public)	ECA support, development finance
13	Industry associations / chambers	Civil society	Trade groups
14	NGOs / advocacy groups	Civil society	Environment, labor, consumer
15	Government	Civil society	As representative of stakeholders at large, society
16	Local communities	Civil society	Residents near operations
17	Future generations	Civil society	Intergenerational transfers
18	Clients / end users	Customers	B2B/B2C buyers
19	Franchisees / licensees	Customers	Operate under brand/IP
20	Distributors / channel partners	Customers (sales structure)	Wholesalers, VARs
21	Retailers / resellers	Customers (sales structure)	Storefronts, e-commerce resellers
22	Board of directors	Governance	Independent & executive directors
23	External auditors	Governance	Financial statement auditors
24	Standards consortia	Governance	e.g., W3C, ISO committees
25	ESG rating providers	Governance	e.g., Sustainalytics, LSEG
26	Insurers	Governance (finance)	P&C, liability, health
27	Credit bureaus & business information providers	Governance (finance)	Dun & Bradstreet, Experian
28	Proxy advisory firms	Governance (finance)	ISS, Glass Lewis
29	Index providers	Governance (finance)	MSCI, FTSE Russell, S&P DJI
30	Rating agencies	Governance (finance)	S&P, Moody's, Fitch
31	Sell-side analysts	Governance (finance)	Broker research analysts

32	Employees & staff	Labor	FTEs, part-time
33	Contractors & freelancers	Labor	Gig workers, consultants
34	Trade unions / works councils	Labor	Collective bargaining bodies
35	Executive management	Management	C-suite, senior leadership
36	Wildlife, ecosystems, pollinators	Nature	Biomass
37	Animals	Nature	Domestic (also testing, etc.)
38	Atmosphere, climate systems, air	Nature	Environment
39	Water, aquifers, wetlands, oceans	Nature	Environment
40	Soil, forests, agriculture	Nature	Environment
41	Carbon credit registries & verifiers	Nature (governance)	e.g., Verra (VCS), Gold Standard
42	Social networks	Public narratives	Online content, blogs, etc
43	Media & press (traditional)	Public narratives	Journalists, outlets
44	Lobbyists / public affairs firms	Public narratives	K Street, EU, etc
45	Stock exchanges & listing authorities	Public sector	NYSE, NASDAQ, LSE, HKEX
46	Sectoral regulators / government agencies	Regulators	Industry-specific regulators
47	Competition / antitrust authorities	Regulators	Merger control, antitrust
48	Consumer protection agencies	Regulators	Truth-in-advertising, product safety
49	Labor & employment regulators	Regulators	Wage & hour, H&S
50	Environmental regulators	Regulators	Permitting, emissions, EHS
51	Export control & customs authorities	Regulators	Licensing, tariffs, clearance
52	Local & municipal governments	Regulators	Permits, zoning, community relations
53	Landlords / property owners	Suppliers (infrastructure)	Leased facilities
54	Utilities providers	Suppliers (infrastructure)	Power, water, telecoms
55	Academic & research institutions	Suppliers (knowledge)	R&D collaboration
56	Executive education / training partners	Suppliers (knowledge)	Universities, bootcamps
57	Data providers / market data vendors	Suppliers (knowledge)	Commercial datasets, feeds
58	Patent holders / licensors	Suppliers (knowledge)	Diverse, private, public
59	Component vendors	Suppliers (production)	Parts, products
60	Contract manufacturers	Suppliers (production)	OEM/ODM partners
61	Consulting, legal, other professional services	Suppliers (services)	External consultants, law firms
62	Payment processors, credit card firms	Suppliers (services)	Networks, gateways
63	Maintenance, repair & operations (MRO) vendors	Suppliers (services)	Equipment upkeep
64	Logistics providers, carriers	Suppliers (services)	3PLs, shippers
65	Call-centers / customer support partners	Suppliers (services)	CX outsourcers, e.g., Teleperformance, Foundever
66	Business process outsourcing (BPO) providers	Suppliers (services)	e.g., Accenture, TCS
67	IT / cloud service providers	Suppliers (technology)	IaaS, PaaS, SaaS
68	Cybersecurity vendors / IR partners	Suppliers (technology)	Prevention & incident response
69	AI suppliers	Suppliers (technology)	e.g., ChatGPT, Gemini
70	Cloud suppliers	Suppliers (technology)	e.g., AWS, GoogleCloud, Azure

The Value Creation Rating (VCr)

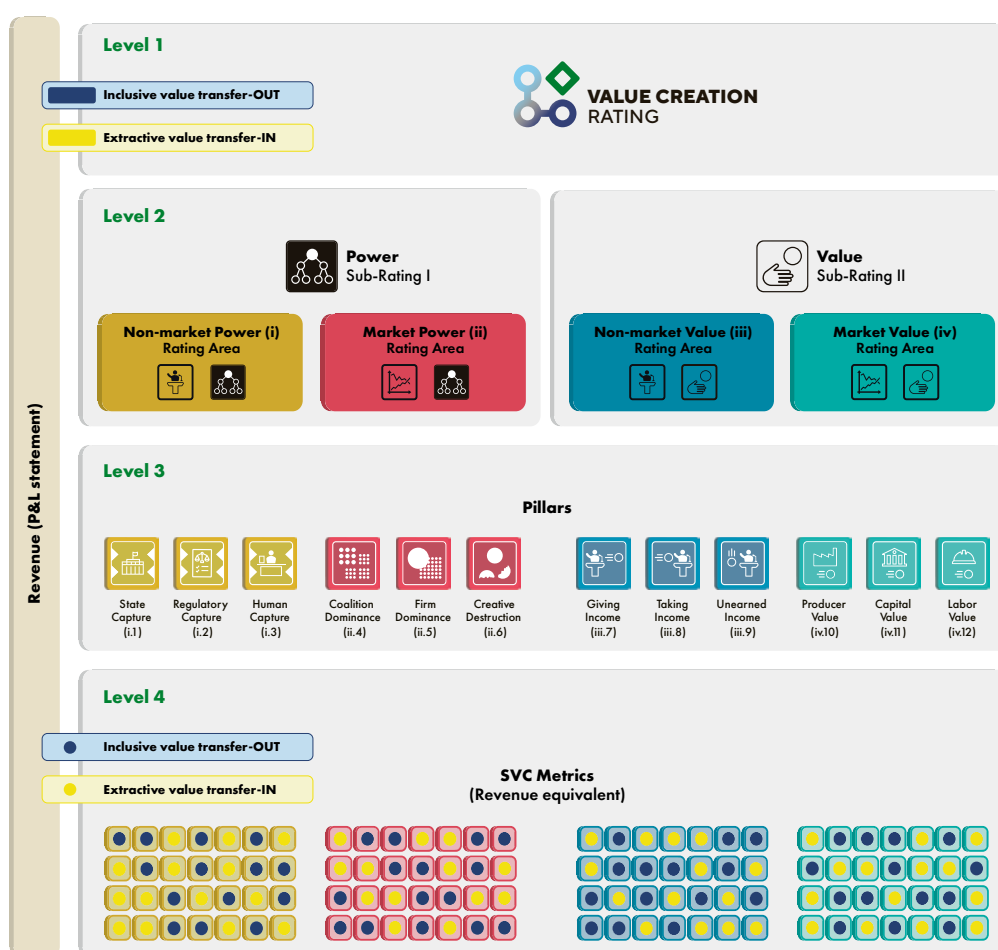
The VCr is the main focus of this proof-of-concept report and the most comprehensive firm-level sustainability measurement. It thoroughly references the business and political economy relationships of a firm and their impacts on all stakeholders. It is measured by ascertaining the respective proportion of a firm's transfer-IN and transfer-OUT activities in relation to value appropriated (i.e., revenue, though profits might theoretically also be used). As a result, the VCr reflects the sustainability of an organization in relation to society at large by fully considering its agency in the political economy.

The VCr measurement is provided as a score with two decimal points that describes the proportion of all 'value creation' in relation to all 'value appropriation' (revenue). At the same time, an equally valid explanation is that it represents a given proportion of inclusive vs extractive value transfers relative to revenue.

The chief computational challenge for the VCr is to establish all of the extractive and inclusive transfer activities of the firm busi-

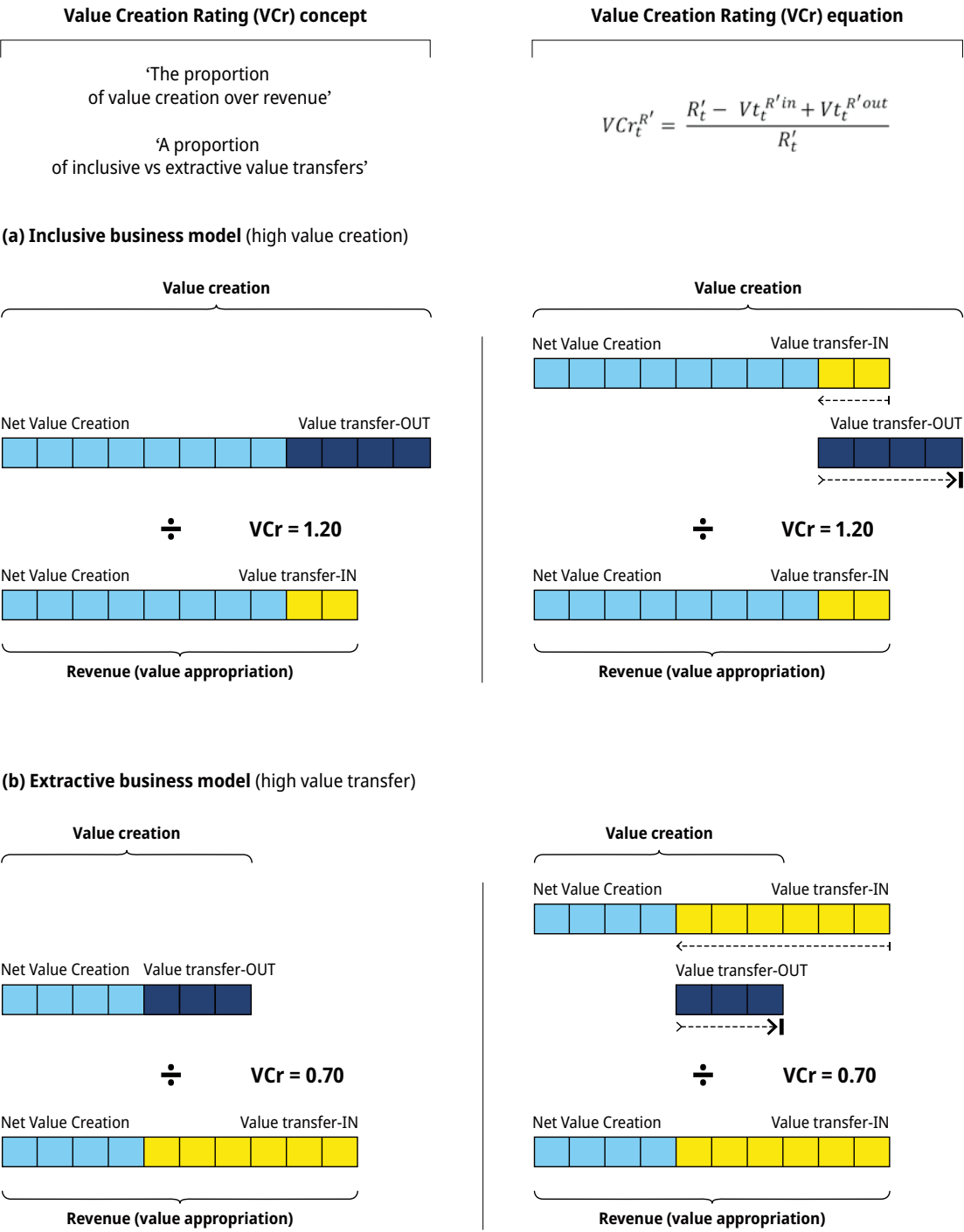
ness model. That means identifying both the first-order 'value created but not appropriated', i.e., 'transfer-OUT', as well as the second-order 'value appropriated but not created', i.e., 'transfer-IN'. The two amounts are calculated by aggregating dozens of SVC Metrics, each of which are quantified in terms of their equivalence to revenue.

The normative and practical usefulness of the VCr is that it allows management, investors, policymakers, financial analysts, or society at large to understand the relative size of value created as a proportion of revenue. As a result, these stakeholder groups can either work to maintain a balance (if this is already at 1.00 or above) or to progressively increase the proportion of value creation in relation to revenue (if it is currently at a low level, e.g., below 0.70). A trend that sees the VCr score decrease over time (e.g., falling from 1.12 to 1.07) is a powerful signal to stakeholders: the proportion of extractive activities is increasing, meaning that the firm's contribution to society is decreasing and there is a risk of it becoming unsustainable and thus endangering its license to operate.



Visual 2.2: The VCr and its four levels: Sub-Ratings (x2), Rating Areas (x4), Pillars (x12), and the constituent SVC Metrics (operationalized as revenue equivalent)

For a more technical but intendedly intuitive way to understand the operationalization of the VCr, see [Visuals 2.2](#) and [2.3](#). These illustrate the operational, conceptual, and equation-based definitions of the measurement.



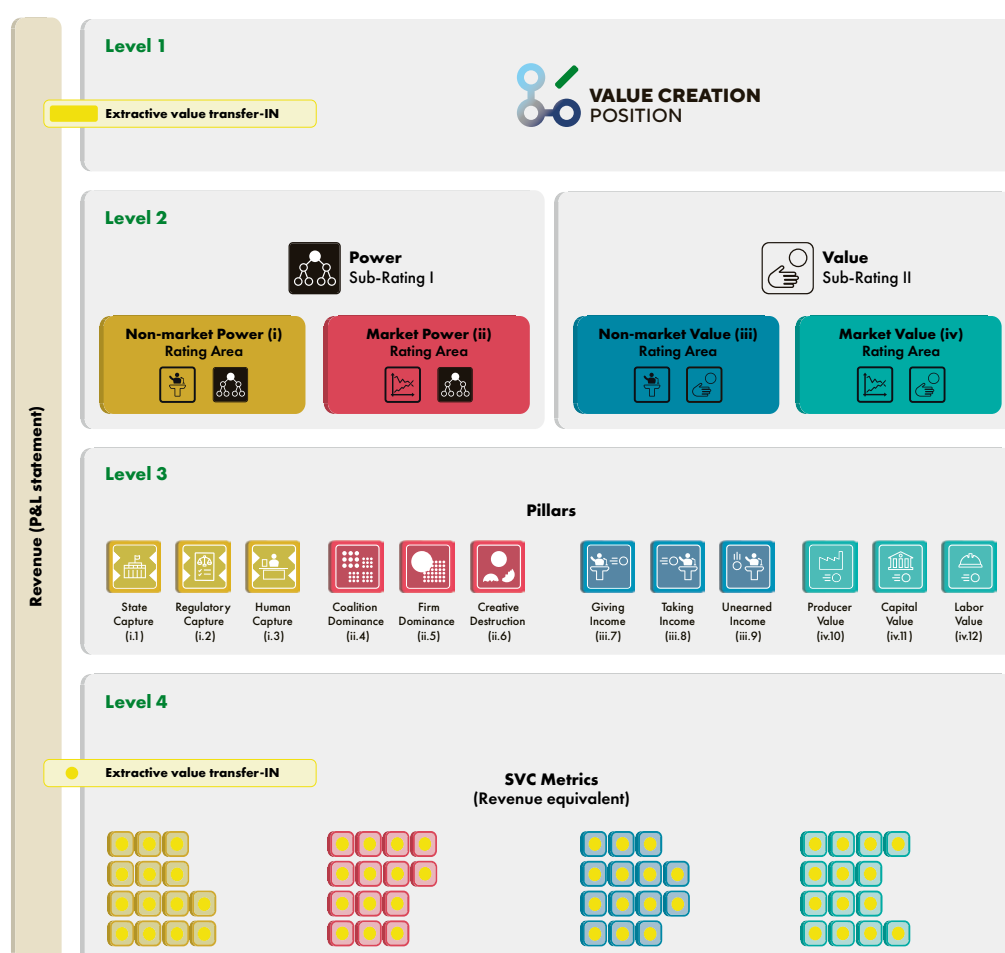
The Value Creation Position (VCp)

While the key focus of this year's *The Sustainable Value Creation of Firms* report is on the VCr measurement, each of the 1,000 Firm Scorecards also include a second SVC measurement: the Value Creation Position (VCp).

The VCp expresses an elementary and distinct position for the sustainability of a firm based on the extractive revenue-generating activities of its business model. Technically, it differs from the VCr by not considering inclusive value transfer-OUT (such as innovation spillovers, positive carbon capture, or an effective tax rate above sector norms), instead focusing on the impact of transfer-IN relative to revenue, or 'value appropriated but not created'. The value transfer-IN amount is ascertained by aggregating all SVC Metrics that express transfer-IN. Specific value transfer-IN Metrics might relate to a firm's negative ecological footprint, reliance on subsidies, or monopoly power. As with the VCr, the VCp measurement requires calculating revenue equivalence.

As a measurement expressing the impact of extractive value transfers, the VCp is provided as an easy to understand percentage that results from dividing 'value created and appropriated' (Net Value Creation) by full revenue (value appropriation). It can be conceptualized as a position on a 'value spectrum', with the VCp being the point where revenue splits into two component segments: the 'value created and appropriated' (Net Value Creation) and the 'value appropriated but not created' (value transfer-IN) extracted from stakeholders (as is illustrated in the right column of [Visual 2.5](#)).

The normative and practical usefulness of the VCp is that it enables management, investors, policymakers, or society at large to understand the proportion of extractive value transfers (transfer-IN) that a firm has. As a result, stakeholders can work to either keep extraction at a low level (as would be the case for a high VCp of above 80%) or, if extraction is deemed to be too high (as would be the case for a low VCp

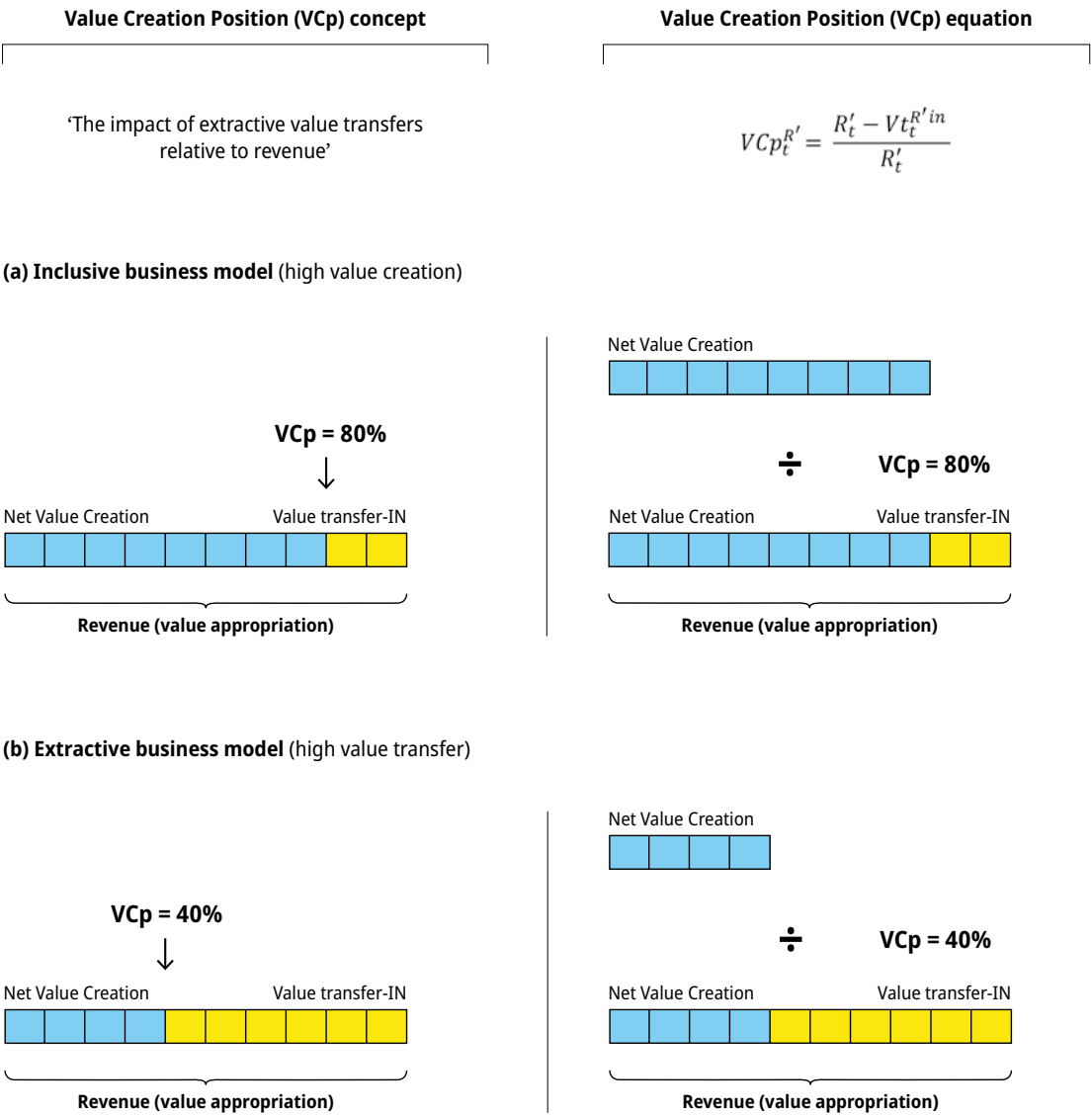


Visual 2.4: The VCp and its four levels: Sub-Ratings (x2), Rating Areas (x4), Pillars (x12), and SVC Metrics (operationalized as revenue equivalent)

of below 60%), attempt to reduce extraction and transform the business model for long-term sustainability. In the latter instance, the proportion of Net Value Creation (and reduced transfer-IN) in relation to revenue would need to be progressively increased. The identification of a decreasing VCp trend over time (e.g., a fall from 85% to 78%) should be a cause for concern since the revenue of the business model is increasingly reliant on extractive activities, making the firm eventually unsustainable and liable to be challenged by regulators and the public at large. It should be noted that the VCp is an intermediate measurement, and a low percentage

is not problematic *per se* since it can be compensated for by transfer-OUT exceeding transfer-IN, as would be reflected in a high VCr score. A low VCp score coupled with a high VCr score is sustainable, but the proportionally large amount of extraction still needs to be managed and will require smart public relations work.

For a more technical understanding of the operationalization of the VCp, refer to Visuals 2.4 and 2.5 that illustrate the operational, conceptual, and equation-based definitions of the measurement.



Visual 2.6: Comparative overview of the VCr and VCp with their main differences

	Value Creation Rating (VCr)	Value Creation Position (VCp)
Describes	The proportion of value creation vs extractive value transfers (in relation to revenue).	The proportion of extractive value transfers (in relation to revenue).
Scope	To measure the comprehensive impact and respective balance of inclusive and extractive value transfers. Operationalizes the relationship between a firm and society by assessing all second-order value transfers—both the ‘positive’ transfer-OUT and the ‘negative’ transfer-IN—that a firm makes with its stakeholders.	Zeroes in on the impact of extractive value transfers that generate revenue. Operationalizes the extractive relationship that a firm has with society by assessing the revenue-equivalent second-order value transfer-IN that a firm extracts from its stakeholders.
Format of results	As a score with two decimal places. Examples: 1.20 (an inclusive firm); 0.70 (an extractive firm).	As a percentage with one decimal place. Examples: 90.5% (an inclusive firm); 40.5% (an extractive firm).
Result range	Common range: 0.50 to 1.50 Feasible range: 0.00 to >2.00	Bounded range: From 0% to 100%
Result interpretation	A score above 1.00 means that a firm’s inclusive transfers (transfer-OUT) exceed its extractive transfers (transfer-IN) and its business model provides more value than it takes from society.	A percentage of 100% means that a firm generates all its revenues from value creation and has zero transfer-IN.
	A score below 1.00 means that a firm’s overall dependence on extractive transfers from stakeholders (transfer-IN) exceeds its inclusive transfers (transfer-OUT) and its business model takes more value than it provides to society.	A percentage of 70% means that a firm generates 70% of its revenues from value creation and 30% of its revenues from extractive transfer-IN (a potentially problematic amount).
	An extremely low score of 0.00 would mean that all of a firm’s revenue comes from extractive transfer-IN while there is no compensatory inclusive value transfer-OUT provided for society.	An extremely low percentage of 0% would mean that a firm generates all its revenues from extractive transfer-IN, a situation where the firm creates no value at all for society.
Basic baselines (sector independent)	> 1.30 Excellent (a generally inclusive firm), value creation exceeds value appropriation (revenue).	> 90% Excellent (a generally inclusive firm that undertakes minimal value extraction).
	= 1.00 Good, value creation and value appropriation (revenue) are in balance.*	= 75% Good (extractive value transfers are at an acceptable level).
	< 0.70 Problematic (a generally extractive firm), value appropriation (revenue) exceeds value creation.	< 60% Problematic (excessive extractive value transfers).**
Baselines	(1) Sector baseline: The firm VCr is above or below the sector baseline (sector-VCr). (2) Country baseline: The firm VCr is above or below the country baseline.	No sector or country baselines are provided.
Normative application	High scores (above 1.00 or above the sector-VCr median) can be achieved by compensating for value transfer-IN with higher levels of transfer-OUT, giving back to society (stakeholders). A universal balance (VCr = 1.00) is achieved by balancing transfer-IN/OUT, meaning that net revenues are ‘value created and appropriated’.	High scores (above 80%) can be achieved by keeping extractive value transfers (transfer-IN) in check, or by progressively reducing their proportion in relation to revenue.

* Note: A VCr of 1.00 indicates that inclusive and extractive value transfers are in perfect balance.

** Note: Can be compensated for by inclusive transfers (transfer-OUT) which would be reflected in a high VCr score.

While a VCr score aims to be a universal expression of the proportion of value creation and transfers that exist in the business model of a firm, its practical relevance is evidently industry- and/or country-specific. Therefore, establishing sector and country baselines is essential. While an Elite Quality Rating (EQR)—a rating of national elite quality based on listed firms to complement the globally comparative EQx—could be established in the future, the current focus for baselines is industry-specific. Section 3.2 provides the details of the sector-VCr results in this proof-of-concept report.

The key challenge in comparing VCr ratings lies in the diversity of industry sectors represented. Different industries face divergent operational contexts, regulatory landscapes, and sustainability challenges that can significantly influence the Metrics being evaluated. For example, the impact of a manufacturing firm on the nature stakeholder is inherently different to that of a financial services company. Even though normalization techniques and sector-specific Metrics could be used to de-emphasize context, such adjustments can only go so far, making VCr ratings difficult to compare across divergent sectors. Moreover, the weights assigned to specific Pillars or Metrics may not fully account for industry-specific factors, further skewing the results when comparing firms from different sectors.

Materiality plays a critical role in shaping these differences by identifying the aspects of sustainability that are most significant for a particular sector or industry. What is materially significant for one sector (such as greenhouse gas emissions in the energy industry) might not be as relevant for another (such as a service-based industry, where employee well-being or data security might be of higher material importance). The VCr attempts to account for these industry-specific differences through tailored Metrics and sectoral benchmarking. Therefore, even though normalization and sector-specific benchmarking are used to provide context, to fully overcome the fundamental problem of ensuring comparability across divergent sectors, a sector baseline—the sector-VCr—has been developed for practical use.

The logic for the sector-VCr is supported by both the academic literature and institutional practice. In “The Need for Sector-specific Materiality and Sustainability Reporting Standards”, Eccles, Krzus, Rogers, and Serafeim (2012), along with organizations like the Sustainability Accounting Standards Board (SASB), emphasize the importance of standardization across sectors. Sector-specific baselines are standard practice: they enable fair peer comparisons, reflect real technology pathways, and turn sustainability into investor-ready KPIs. They are built into International Financial Reporting Standards (IFRS), investor ratings such as Morgan Stanley Capital International (MSCI) and Standard & Poor’s Global Corporate Sustainability Assessment (S&P Global CSA), transition tools like the Science Based Targets initiative (SBTi) and the Transition Pathway Initiative (TPI), and policy frameworks such as the European Union Emissions Trading System (EU ETS) and the European Union Taxonomy for Sustainable Activities (EU Taxonomy). The sector-VCr follows this approach, setting industry-specific targets and thresholds to keep results comparable, credible, and valuable for capital allocation.

The sector baseline is arrived at by the use of a tailored suite of industry-specific performance Metrics. These are then calibrated to describe median performance within a sector, a notion that references the work of Lydenberg, Rogers, and Wood who underscored the need to include “the most material issues for each sector” (2010, p. 18). For the sector-VCr, the median is currently used to calculate the central value of applicable Metrics, ensuring that the baseline minimizes the influence of outliers (with more data, an average might be calculated in the future). The sector-VCr is thus designed to capture the sustainability of value creation across firms within a particular sector. This double materiality perspective actualizes the normative aspect of this work: firms that score above the median (or average) drive up their sector baseline, increase the sector-VCr, and improve its sustainability. Any sector that engages in greater sustainable value creation has a positive impact on society at large.



What is Non-market?

The political dimension where business model rules are determined and value and risk creation or their transfers are enabled.



What is Market?

The economic dimension where value and risk creation or their transfers are actualized as a result of managerial decision-making.



What is Power?

The capacity to coordinate stakeholders and execute firm strategy that facilitates both value creation and the appropriation of value *not* created.



What is Value?

Everything that is worth appropriating as the outcome of first-order productive activities. Its creation increases the size of the overall economic pie.

2.2 The Foundations and Structure of the VCr: Architecture and SVC Metrics

The VCr architecture

The VCr architecture follows a bottom-up aggregation process across four levels, where individual Metrics are combined into scores that feed into the corresponding 12 Pillars. These Pillar scores are then themselves aggregated into the 4 Rating Areas and further synthesized into the overall VCr score. This structured approach ensures that the VCr is both detailed and holistic. That is, it fairly captures the complexity of modern business practices and their impact on sustainability in order to inform managerial decision-making.

- Level 1 is the overall VCr score of a firm and the highest level of aggregation.
- Level 2 contains the two firm Sub-Ratings, power and value. By combining power and value with the non-market (political) and market (economic) dimensions, the 4 Rating Areas emerge (as is depicted in [Visual 1.4](#)).
- Level 3 contains the 12 Pillars, each representing discrete political economy notions that provide the conceptual homes for the firm-level SVC Metrics.
- The 12 Pillars are clustered into groups of three around the theme of one of the 4 Rating Areas. Each Pillar represents a sustainable value creation theme relevant to the firm business model and hosts the set of SVC Metrics that align with the perspective that a particular Pillar takes on the political economy (see [Visual 2.7](#)).

The most fundamental level of the architecture is the fourth level of the Metrics. These are the indivisible datasets that provide evidence of the value creation or extractive transfer activities of a business model—the analytical basis used to rate firms. Each Metric uses datasets that represent a business model activity and is assigned a monetary value equivalent that is matchable with the revenue of the firm.

The VCr architecture's analytical utility

The four discrete and intermediate aggregation levels of the VCr architecture provide innovative ways to understand a business model and its relationships with diverse stakeholders. For instance, at level 2, one can glean how much political economy 'power' a firm possesses or how much 'non-market value' it creates. At level 3, one can ascertain a firm's 'Creative Destruction', the 'Capital Value' created by its financial activities, or how relevant its 'Institutional Capture' capabilities are to its revenue generation. Many of these insights are original and not currently utilized in most sustainability or ESG reports.

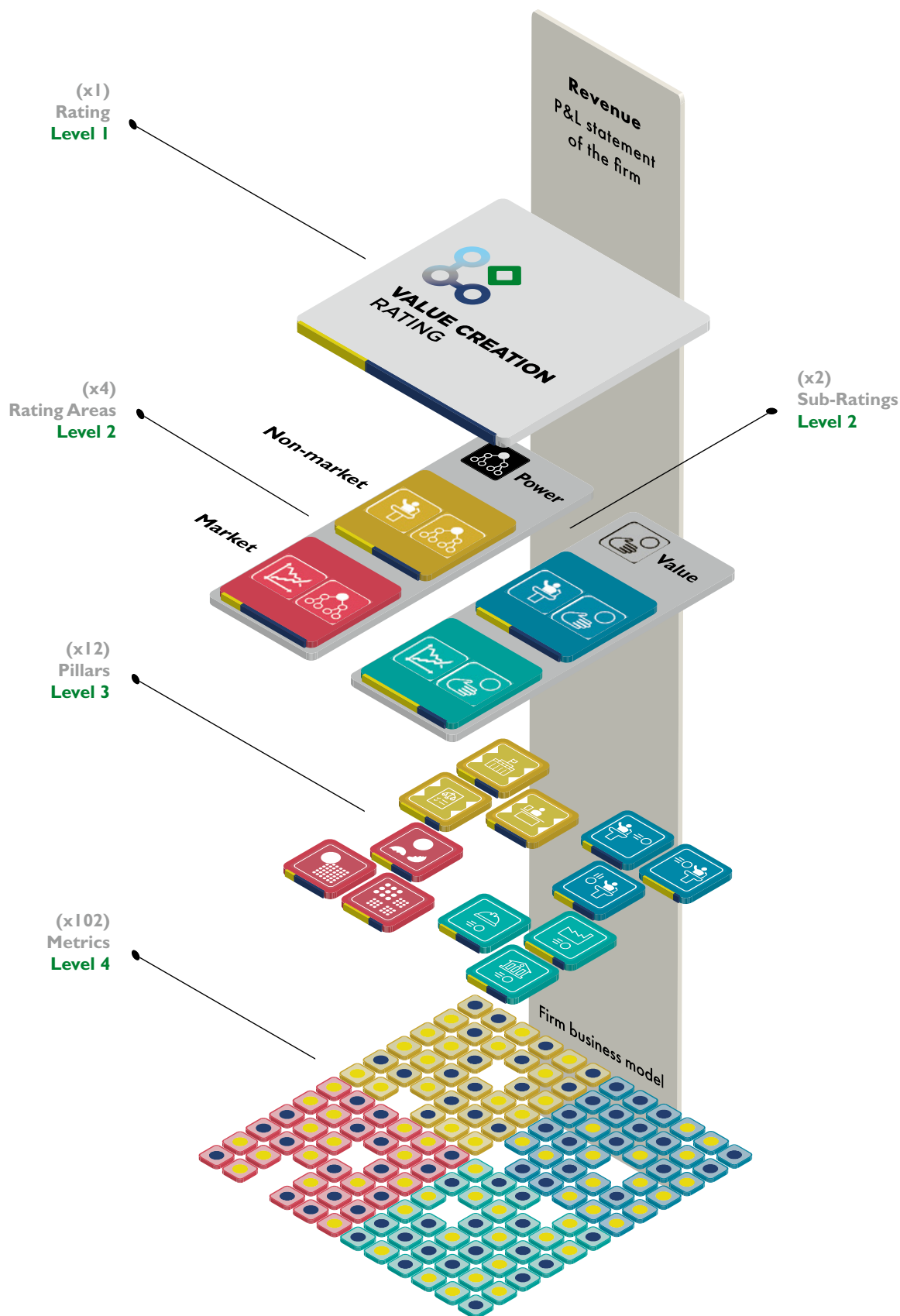
The intermediate aggregation levels of the VCr architecture reflect the overall aim of the VCr project to numerically ascertain the critical realities of firms in terms of how they create or transfer value, as well as how their agency may positively or negatively impact economic growth and human development. Among the additional benefits that the architecture provides, the following three factors are particularly important:

- Granularity for analysis: By breaking down value creation into Rating Areas, Pillars, and Metrics, stakeholders can clearly understand which aspects of a firm's activities contribute or detract from sustainable value creation.
- Transparency for alignment: The VCr architecture and SVC Metrics allow firms to identify specific areas for interventions, helping them to align their day-to-day operations with long-term sustainability goals.
- Benchmarking and comparability for transformation: The VCr score enables firms to benchmark their performance against peers within the same sector or against firms from other sectors, providing insights into best practices, areas for improvement, and strategy development.

The VCr architecture thus serves as both an evaluative and strategic tool, enabling firms to self-assess their value creation and risk origination capabilities and identify opportunities to enhance their contributions to sustainable development in the countries in which they operate.

All of the Metrics that underlie the VCr measurement conceptually reference firm business model activities

The aggregates of the four VC_r levels are all relative to the firm's revenue in the profit and loss (P&L) statement



Visual 2.7: The four levels of the VC_r architecture and their relation to firm revenue and the business model

The SVC Metrics

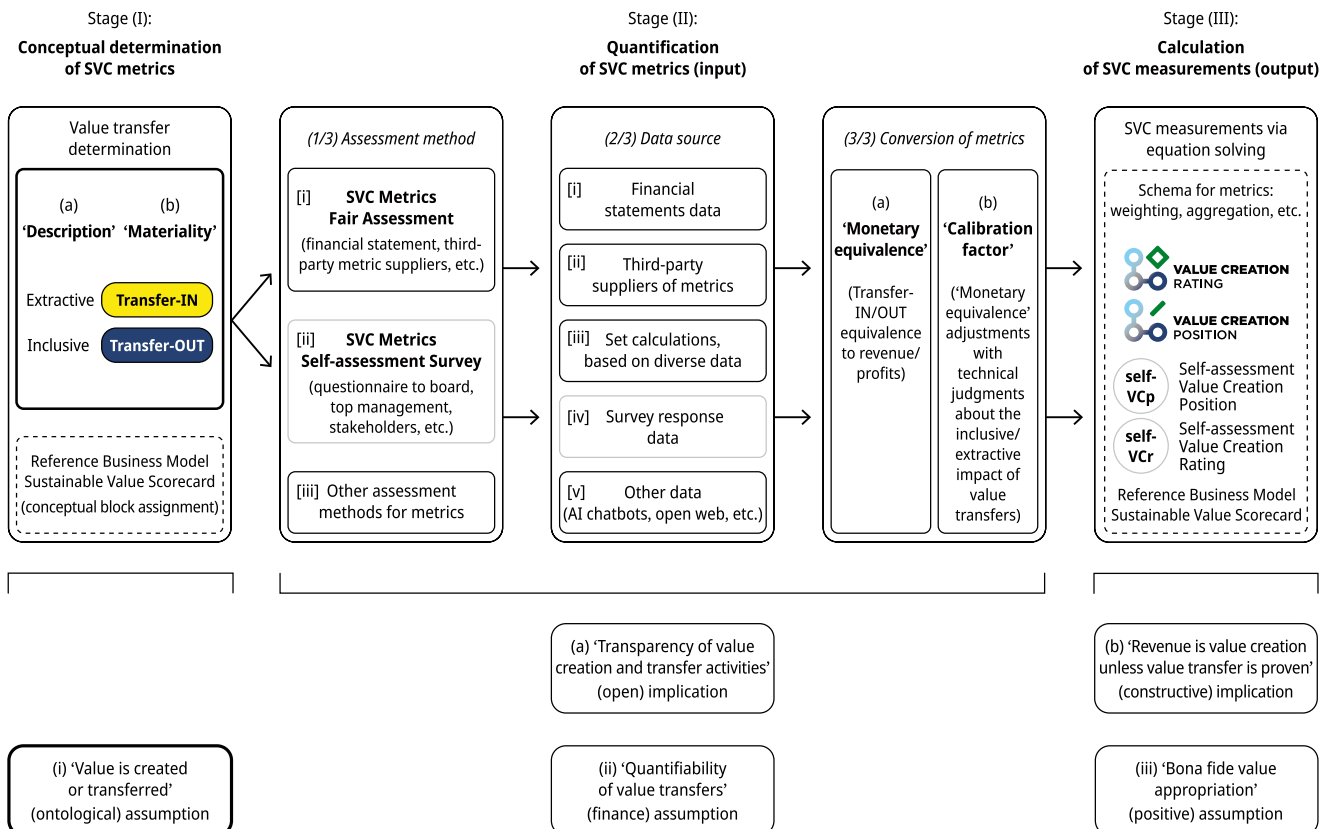
The fundamental level of the VCr architecture is comprised of SVC Metrics. These capture specific firm-level activities, practices, and outcomes that can be quantified in terms of firm revenue and express sustainable value creation. The Metrics are data points that feed into the next levels of the architecture: the 12 Pillars, 4 Rating Areas, 2 Sub-Ratings, and ultimately, the VCr (and the VCr) scores.

As the foundational inputs for the firm-level SVC measurements (both the VCr and VCr), the datasets that inform the Metrics become the conceptually indivisible and discrete firm-level inputs that describe quantifiable value creation and risk transfers by a firm's business model. There are two types of Metrics: those that evidence extractive transfer-IN and those that describe inclusive transfer-OUT. Ultimately, firm-level VCr (and VCr) scores are the result of a three-stage process shown in **Visual 2.8** that involves: the (I) conceptual determination of SVC Metrics; the (II) quantification of SVC Metrics (input); and the (III) calculation of SVC measurements (output).

The initial stage (I) in establishing any SVC Metric is its conceptual determination (see Casas-Klett & Nerlinger, 2023). In essence, any Metric should express the inclusive value creation or extractive value transfer of the business model (i.e., its transfer-IN or transfer-OUT). Every Metric hence points to what Eccles and Stroehle (2018) call (in reference to the ESG litera-

ture) "social origins". Moreover, all SVC Metrics follow the calls of Eccles, Krzus, Rogers, and Serafeim (2012, p. 70), Lydenberg, Rogers, and Wood (2010), or the Global Reporting Initiative (GRI) for sector-specific materiality. This consideration is critical for reporting on ESG, CSR, and sustainability performance and also informs the sector-VCr baseline (see the discussion in Section 2.1).

The table in Section 5.2 lists the 102 Metrics used in this proof-of-concept report, describing what each Metric is (its 'description' or 'what we measure') as well as the rationale that underpins its inclusion in the VCr (its 'materiality' or 'why we measure'). The determination on whether a dataset is appropriate to inform an SVC Metric starts by applying the classification logic of the 4 Rating Areas, each of which have their own 3 Pillars. The Metrics of the (i) 'Non-market Power' Rating Area follow the logic of the capture of the political and narrative market arenas; those of the (ii) 'Market Power' Rating Area follow the logic of 'dominance' in the economy; those of the (iii) 'Non-market Value' Rating Area follow the logic of value creation in the political and narrative market arenas; and those of the (iv) 'Market Value' Rating Area follow the logic of value creation in the economy. Moreover, and as part of the conceptual determination, each Metric is also associated with one of the 12 VCr Pillars (see **Visual 2.7**) providing an additional level of specificity.



Visual 2.8: The three-stage process to establish firm-level SVC measurements and their constituent Metrics (adapted from Figure 6.6, Casas-Klett, 2026)

The Pillars of the VCr architecture

Non-Market Power Pillars

(i.1) State Capture

This Pillar assesses firm power and direct dominance, actual and attempted, over the state apparatus. Metrics relevant to this Pillar evaluate contributions to political campaigns or the admixture of public and private interests when there is state ownership (or a degree of it). High levels of State Capture often imply that firms have accumulated political (non-market) power and are capable of engaging in direct extractive value transfers from the state by influencing allocative processes where politics plays a role. This is to the detriment of market-based allocative mechanisms and fair competition.

(i.2) Regulatory Capture

Regulatory Capture measures the concrete influence that firms have over regulators and the rules of the game. Such power will shape policies in ways that disproportionately benefit their business models, often at the cost of broader societal welfare. This Pillar focuses on evidence of activities such as political donations or lobbying contributions that indicate influence over policymaking and the crafting of regulations. As with direct state capture, these activities skew markets in favor of particular firms resulting in value transfers. The Metrics used for this Pillar may also describe the integrity and strength of institutions and the compliance—or most critically—the non-compliance of firms.

(i.3) Human Capture

This Pillar describes the ways that firms exercise influence over individuals and associated social structures such as trade unions and equity and inclusion policies. The Metrics assess practices that either bolster or undermine the bargaining power of individual human stakeholders. Organizations that exhibit positive performance in the Human Capture Pillar demonstrate a commitment to avoid extraction from individuals by committing to fair labor standards, equitable representation, and the protection of workers' rights.

Market Power Pillars

(ii.4) Coalition Dominance

Coalition Dominance examines the power dynamics within markets with a particular focus on business coalitions or alliances that lead to dominance over other firms in specific sectors. This Pillar examines dominant coalition activities like cartel formation, monopolistic practices, and anti-competitive agreements that can reduce market efficiency and fairness and lead to value transfers.

(ii.5) Firm Dominance

This Pillar assesses an individual firm's influence within its specific industry sector, using Metrics that show market share concentration and the ability of a firm to set industry standards. A high level of Firm Dominance could signal extractive practices if a firm leverages its strong position to preempt fair competition, for example, through restrictive contracts or prohibitive market entry barriers.

(ii.6) Creative Destruction

Creative Destruction hones in on a firm's ability to innovate and drive forward industrial transformation, whilst also assessing its exposure to the innovatory efforts of other firms. Metrics in this Pillar evaluate investments in research and development (R&D), the adoption of new technologies, and the pursuit of disruptive business models. Firms that score well in this Pillar contribute positively to market dynamics by enhancing productivity and fostering innovation.

(iii.7) Giving Income

Giving Income assesses a firm's contributions to societal welfare through their business model activities and voluntary practices such as philanthropy, community investments, and support for education or health initiatives. This Pillar highlights the ways a firm's resources are, independent of their profit-seeking goals, engaged in generating impact and benefiting society as a whole. This provision of public goods supports the state's goals. Activities considered in the Giving Income Pillar include setting fair trade standards with farmers, building entrepreneurial ecosystems to develop products and services and thus supporting startups and higher levels of employment, sponsoring community projects, upgrading infrastructure, or providing essential services to underrepresented communities.

(iii.8) Taking Income

Taking Income evidences subsidies and other types of financial support that firms receive that could be indicative of value extraction. It includes Metrics that describe a firm's de facto financial relationship with the state such as effective tax rates, subsidies from governments, and any preferential financial arrangements that state institutions have granted. Excessive reliance on such direct (or indirect) monetary transfers without corresponding inclusive contributions can indicate unsustainable practices that ultimately distort fair value creation processes in the political economy.

(iii.9) Unearned Income

This Pillar measures the value that firms receive but do not create themselves resulting from favorable institutional arrangements and indirect market distortions. Unearned Income Metrics include the use of preferential mining rights, licenses to pollute, benefits derived from operating in regions with less stringent regulations, and the granting of exclusive licenses by the state. These unfair advantages often come with potential reputational risks, are a disincentive to innovation, and may pose long-term sustainability challenges.

The VCr's 12 Pillars constitute a structured classification system that yields differentiated market-relevant signals

Market Value Pillars

(iv.10) Producer Value

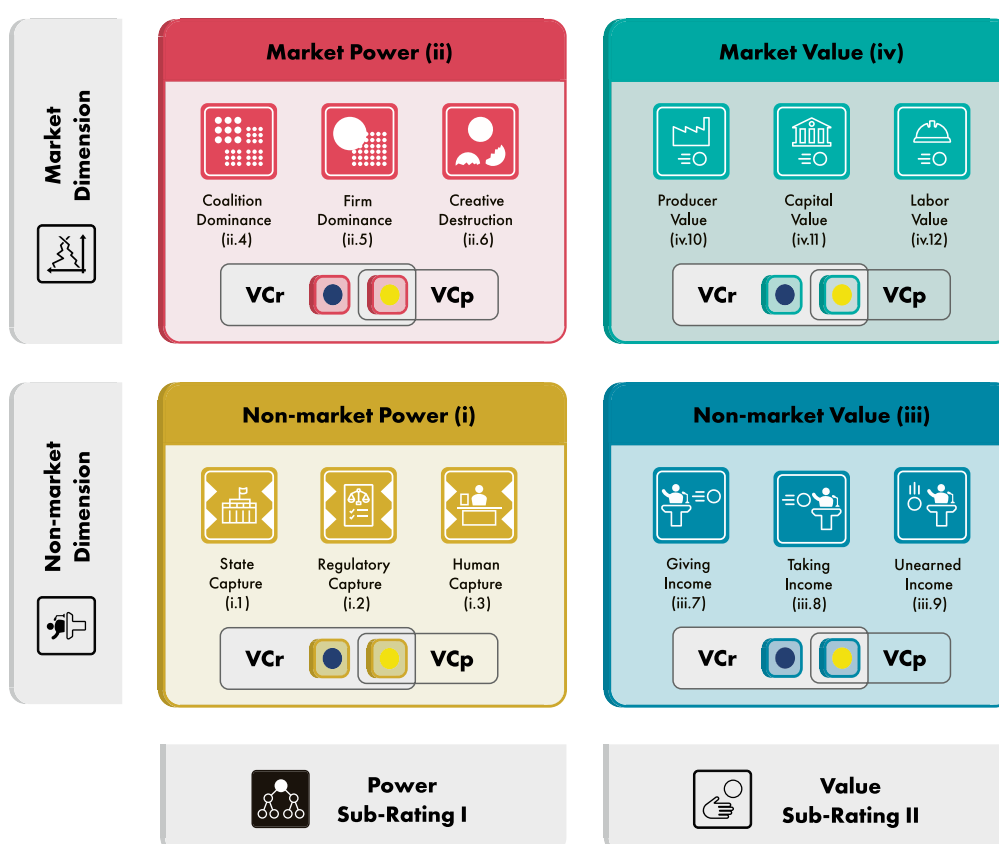
Producer Value examines a firm's ability to generate positive economic outputs through first-order productive activities. Metrics in this Pillar assess issues like operational efficiency, value-added production, and energy productivity. High scores in this Pillar indicate that firms are optimizing their resources to generate value in ways that align with sustainability principles and long-term societal value creation.

(iv.11) Capital Value

Capital Value focuses on a firm's financial investments in growth. These include capital expenditure related to increasing production efficiency, developing new technologies, or supporting renewable energy, environmental projects, or community development. It also attempts to capture the degree of risk origination, as the undertaking of risk is an essential type of value creation. This Pillar also assesses financial efficiency and innovation across capital markets. The Metrics measure how financial decisions are aligned with sustainable value creation, and aim to identify investments that boost long-term economic development.

(iv.12) Labor Value

Labor Value assesses the extent to which firms invest in their workforce to foster productivity and well-being. Metrics in this Pillar include measuring employee satisfaction, initiatives that promote equity, diversity, and inclusion, fair compensation, and opportunities for the development of skills. Firms that prioritize labor value are likely to see increased innovation, reduced employee turnover, and stronger stakeholder relationships, contributing to long-term sustainable value creation.



Visual 2.9: The 4 Rating Areas and 12 Pillars of the Political Economy Matrix, each hosting a set of transfer-IN/OUT Metrics that are used by the VCr/VCp

The Business Model Sustainable Value Scorecard: A classification and interpretation guide for Metrics

To help determine the Metrics in conceptual consistency with the architecture, the Pillars (x 12) and Rating Areas (x4) of levels 2 and 3 are rendered as a scorecard. The practice-oriented literature on business models shows that “a visual model or artifact” can “assist strategic managers in thinking about how they can act” (Simonse, 2014, p. 67). The Business Model Sustainable Value Scorecard is such an artifact. It is also a framework that has various other uses that include assisting in the conceptual classification and determination of the Metrics and the judgments that need to be made on their relative weighting for the VC_r and VC_p after monetary equivalence and calibration factors are established (see **Visual 2.8**, Stage II on the quantification of Metrics).

It is important to emphasize that just as with any of the other aggregate measurements underlying the VC_r and VC_p the 12 Pillars, rendered as cells in the scorecard, not only guide the conceptual determination and weighting of the Metrics, but also aid in holistic analysis and interpretation of the sustainable value creation of the firm (see VC_r Firm Scorecard, **Visual 1.6**).

The next section on the VC_r methodology discusses the empirical analysis of the nine-step development cycle, which includes central parts of the three-stage process to establish firm-level SVC measurements and their Metrics.

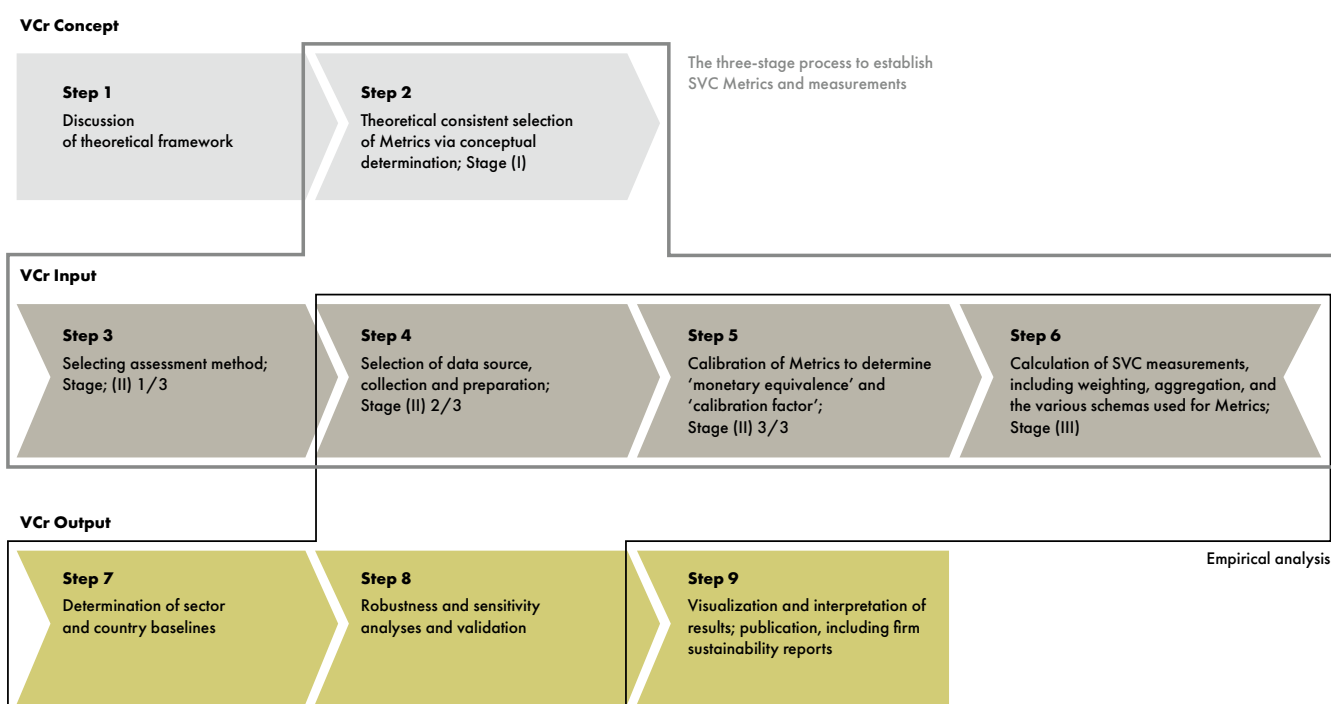
The Business Model Sustainable Value Scorecard					Inclusive value transfer-OUT ‘Value appropriated but not created’	Extractive value transfer-IN ‘Value created but not appropriated’
I. Power (bargaining)			II. Value (creation/transfer)			
(i) Non-market Power Capacity to influence non-market and narrative market arenas			(iii) Non-market Value Value creation in the non-market and narrative market arenas			
(i.1) State Capture	(i.2) Regulatory Capture	(i.3) Human Capture	(iii.7) Giving Income		(iii.9) Unearned Income	
			(iii.8) Taking Income			
(ii) Market Power Capacity to influence the market arena			(iv) Market Value Value creation in the market arena			
(ii.4) Coalition Dominance	(ii.6) Creative Destruction		(iv.10) Producer Value			
(ii.5) Firm Dominance			(iv.11) Capital Value			
			(iv.12) Labor Value			

Visual 2.10: The Business Model Sustainable Value Scorecard and its 2 Sub-Ratings, 4 Rating Areas, and 12 Pillars (adapted from Exhibit 2, Casas-Klett & Nerlinger, 2023)

2.3 The VC_r Methodology

The VC_r methodology follows a structured 9-step development cycle that references the OECD (2008) guidelines for constructing composite indicators and is depicted in [Visual 2.11](#) below. It represents a comprehensive evaluation of sustainable value creation, ensuring robustness, transparency, and comparability. On the basis of the conceptual determination of Metrics, this section elaborates on specific aspects of the VC_r Input and Output processes (steps 4 to 8). The discussion presupposes that the necessary choices have been made regarding the selection of the assessment method for the Metrics, i.e., the fair assessment of Metrics (see [Visual 2.8](#)).

This section describes the fair assessment approach for the SVC Metrics, even as Step 3 offers other possibilities like the self-assessment survey discussed next in Section 2.4. Regardless of which of the two approaches is chosen for Step 3—fair assessment or self-assessment—our commitment to full transparency means that all of the steps taken in data collection are documented and made available for external scrutiny (see Section 5.3).



Visual 2.11: The 9-step development cycle for the VC_r measurement: From theory to interpretation

VCr input: Steps 4 to 8

Step 4: Selection of data sources, collection and preparation; Stage (II) 2/3

The selection of the data sources along with the data collection process is fundamental in ensuring the reliability and credibility of the VCr. We gather data from a wide range of sources including financial statements, set calculations based on diverse data, and third-party metric suppliers. Specifically:

- **Public financial reports:** Financial reports like Profit and Loss (P&L) statements, balance sheets, and cash flow statements provide key information that is useful in assessing the economic aspects of value creation.
- **Sustainability reports:** Non-financial disclosures from firms provide insights into social and environmental issues such as their carbon emission levels, energy usage, and community investments.
- **Regulatory filings:** Government filings and disclosures (e.g., subsidies received, tax compliance) are crucial for evaluating value extraction activities and understanding a firm's relationships with regulatory authorities.
- **Third-party data suppliers:** Independent data is sourced from industry databases like MSCI (Morgan Stanley Capital International), ISS (Institutional Shareholder Services), S&P Global (Standard and Poor's), CDP (Carbon Disclosure Project) and LSEG (London Stock Exchange Group). In addition, NGOs and research institutions provide data that helps to cross-validate information and ensure a balanced assessment.

Step 5: Calibration of Metrics to determine 'monetary equivalence' and the 'calibration factor'; Stage (II) 3/3

The essential step to calibrate the Metrics requires a conversion that involves translating all transfer-IN and transfer-OUT activities to establish 'monetary equivalence' and then adjusting these values with a 'calibration factor'. This facilitates taking a financial perspective on a firm's positive contributions or negative impacts. The process combines several approaches:

- **Prices of externalities:** Many sustainability Metrics represent externalities—impacts on society or the environment that are not captured in market prices. These impacts can be converted into monetary terms using the price of externalities, such as the social cost of carbon for greenhouse gas emissions or government-imposed fines for pollution. Assigning a price to these externalities allows a clearer understanding of the materiality and financial implications of unsustainable practices.
- **Spillover estimates:** Sustainable value creation often results in positive spillovers, such as improvements in community health or technological advances that benefit society or other industries. These spillovers can be estimated using multipliers derived from academic research or industry-specific studies. For example, investments in employee training may be converted into monetary values by estimating increases in labor productivity and the subsequent impact on firm revenue.
- **Multipliers and research-based calibration factors:** To convert complex, non-monetary outcomes into financial terms, we leverage multipliers obtained from regression analyses and research findings. These multipliers quantify the relationship between certain activities (e.g., investments in renewable energy) and their estimated economic value. By applying these research-based conversion factors we can better capture the indirect benefits or avoided costs associated with sustainable practices, thus providing a monetary representation of their impact.

After establishing 'monetary equivalence', a 'calibration factor' is crucial in providing stakeholders with a tangible understanding of how non-financial activities add or subtract value in monetary terms. This calibration step is technically challenging but can lucidly bridge the gap between the SVC Metrics and financial performance, allowing for a better integration of sustainability into managerial and financial decision-making. Further details and examples are provided in Section 3.3.

Step 6: Calculation of SVC measurements, including weighting, aggregation, and the various schemas used for Metrics; Stage (III)

The weighting and aggregation of Metrics is key in determining the relative importance of different aspects of value creation and extraction. In mirroring the VCr architecture, the methodology uses a hierarchical weighting system that follows the four levels:

- Level 1 (Rating Level): The VCr rating is the top-level aggregate score.
- Level 2 (Sub-Rating and Rating Area Level): The framework is split into the 2 Sub-Ratings of Power and Value, with Power contributing one-third and Value contributing two-thirds to the overall score. Within each Sub-Rating, there are subdivisions: Non-market Power and Market Power under the Power Sub-Rating, and Non-market Value and Market Value under the Value Sub-Rating, resulting in a total of 4 Rating Areas.
- Level 3 (Pillar Level): The 12 Pillars are placed under these 4 Rating Areas and provide specific areas of focus. Each Pillar is weighted according to its contribution to sustainable value creation, with higher weights assigned to Pillars that have greater impact.
- Level 4 (Metric Level): This proof-of-concept report uses 102 Metrics spread across the 12 Pillars. Each of these are assigned individual weights through a Budget Allocation Process to ensure that each Metric is appropriately reflected in the overall VCr rating.

The weighting schema is designed to emphasize economic value creation while also accounting for the importance of power dynamics and political influence. By weighting the economic and political Sub-Ratings differently, we ensure that the methodology prioritizes sustainable practices that genuinely contribute to long-term value creation, risk origination, the minimization of value and risk transfers, societal well-being, and the environment (see also the weighting table in [Visual 5.1](#)).

This step also includes normalization to ensure that the data from different firms can be fairly compared. Given that firms vary in terms of size, industry, and geographical context, we use intensity variables such as emissions per unit of revenue or R&D expenditure as a percentage of total sales to normalize data effectively. The advantages of using intensity variables include:

- Scalability: Intensity variables allow comparisons across firms of different sizes, making it easier to assess performance irrespective of scale.
- Efficiency: By focusing on efficiency measures (e.g., emissions per unit of production) firms can understand the effectiveness of their resource use rather than just looking at the absolute quantities.
- Context sensitivity: Intensity variables account for differences in firm operations, ensuring that sustainability performance is measured relative to the firm's operational context.

Once the three stages for the calculation of SVC measurements are complete, the VCr rating is determined for each firm and the construction process moves onto delivering the output.

VCr output: Steps 7 and 8

Step 7: Determination of sector (sector-VCr) and country baselines

The VCr rating is then used to benchmark firms both within specific sectors and across different sectors within the economy, providing valuable insights into their relative performance. Establishing baselines like the sector-VCr allows for benchmarking and helps stakeholders, including investors, to identify industry-specific leaders and laggards in sustainable value creation, promotes best practices, and drives competition toward higher sustainability standards.

Step 8: Robustness and sensitivity analyses

Robustness and sensitivity analyses are conducted to verify the stability and reliability of the VCr. This process involves:

- **Testing Metric weights:** Evaluating how changes in the weighting of Metrics affect the overall score.
- **Exploring different data scenarios:** Analyzing the impact of missing data or data quality issues on the final score.
- **Mitigating biases:** Ensuring that biases introduced through data collection, weighting, or aggregation are identified and minimized.

These and other types of analysis are necessary to ensure that the VCr is a reliable and credible tool for evaluating sustainable value creation so that users have confidence in the rating.

The final Step 9 is expounded on in Section 2.6 (and depicted as part of **Visual 2.11**). It refers to the visualization, interpretation, and publication of the results.

2.4 The 'self-VCr': The Self-Assessment Survey for Internal Transformation

As was alluded to in Section 2.3, the SVC initiative will provide firms with an opportunity to confidentially self-assess their VCr score. This has been facilitated by the development of a specific tool that complements the VCr: The 'Self-assessment Value Creation Rating' ('self-VCr', see Casas-Klett, 2026, p. 343). Evidently, firm self-reporting does not offer comparability across dozens and (in the future) potentially thousands of companies—which is what the VCr2025 proof-of-concept report of listed firms strives for—as it invariably leads to biases or inconsistencies. However, self-assessments offer distinct value by capturing and reflecting the unique insights gained from the direct exchanges between top management teams, boards, and investors. The self-VCr survey instrument and analytical toolset is planned for release alongside next year's VCr2026.

The self-VCr is a tool that will offer firms the opportunity to report unstructured and qualitative data in strict confidence, allowing the tacit knowledge held at the top echelons to be transformed into structured and transparent insights. The self-assessment survey will also support the sustainable value creation reporting of firms. This survey-based form of disclosure will certainly contain biases and require careful validation. Nonetheless, it will still offer evidence-based guidance and provide opportunities for specific firm transformations.

2.5 The Links between the VCr and the Elite Quality Index (EQx)

For readers familiar with the SVC initiative's sister project to the VCr—The *Elite Quality Index (EQx): The Sustainable Value Creation of Nations*—we now consider the relationship between the two measurements.

The EQx ranks the nations of the world in terms of their elite quality at the macro-level, while the VCr focuses on the business model of the firm at the micro-level. Both projects align with the key motivation driving the SVC Initiative: to shed light on the sustainable value creation of the political economy and the present and future prospects for general welfare and economic prosperity.

The two analytical levels, the macro and the micro, are discrete yet have a fundamental connection. The link between them can either be direct or via the meso levels that function as transmission mechanisms, the most important of these being the elite system. Ultimately, the measurements for the macro-level political economy and the micro-level firm are conceptually consistent and even mirror each other as they operate at different scales. Both the EQx and the VCr aim to identify the proportion of inclusive value creation vs extractive value transfers. This is reflected in their respective operationalization methods and their analogous four-level architecture.

What are the technical parallels and differences between the EQx and VCr architecture?

In the EQx, level 4 is populated by political economy 'Indicators'; in the VCr these are the firm-level 'Metrics'.

Both of these types of datasets are aggregated at level 3 in the 12 Pillars that remain the same for both measurements. The same is true of level 2, where 'Power' and 'Value', are termed as 'Index Areas' in the EQx and 'Rating Areas' in the VCr. The macro EQx's 'Economics' concept becomes 'Market' for the firm-level VCr, while the EQx's 'Politics' concept becomes 'Non-market' for the firm-level VCr. These differences are depicted in **Visual 2.12** that also contrasts the respective weighting schemas.

Elite Quality Index Report 2025 (EQx2025)
The Sustainable Value Creation of Nations



SSRN
Academic Version



Anthem Press
full version

Visual 2.12: The similarities and differences between the EQx and the VCr architecture

Level	 ELITE QUALITY INDEX	 VALUE CREATION RATING	EQx Weighting	VCr Weighting
1	1x Index EQx <i>The Sustainable Value Creation of Nations</i>	1x Rating VCr <i>The Sustainable Value Creation of Firms</i>	Conceptual determination: - Power 1/3 vs Value 2/3; - Politics 1/3 vs Economics 2/3	Conceptual determination: - Power 1/3 vs Value 2/3; - Non-Market 1/3 vs Market 2/3
2	2x Sub-Indices: Power & Value 2x Dimensions: Economics & Politics 4x Index Areas	2x Sub-Ratings: Power & Value 2x Dimensions: Market & Non-Market 4x Rating Areas	Conceptual determination, with most Pillars accounting for 1/3 of Index Area	Conceptual determination, with most Pillars accounting for 1/3 of Rating Area
3	12 Pillars	12 Pillars	Budget Allocation Process (BAP) for Indicators within each Pillar	Data-driven weighting selection using structured predictive analysis (plan)
4	149 Indicators (EQx2025)	102 SVC Metrics (VCr2025)	Indicators are normatively assessed for their polarity or a non-linear optimum is established	Metrics undergo a calibration stage where 'monetary equivalence' and a 'calibration factor' are assigned

2.6 The VCr's Applied Frameworks: Supporting Decision-Making

Regardless of whether one uses the fair assessment approach (as in this VCr2025 proof-of-concept report) or the self-assessment approach (see Section 2.4), the VCr methodology involves visualizing the results in formats that are accessible and informative for a variety of stakeholders. This proof-of-concept report is one such deliverable, but firms will also be able to access other products in the future, including:

- Individual VCr Firm scorecards: Detailed results and baselines for individual firms (beyond the existing one-page summaries in this report), outlining their comparative performance across different Rating Areas, Pillars, and Metrics.
- Sector comparisons: Charts and visual tools to compare firms within specific sectors (such as the sector-VCr) and countries, providing baselines that allow companies to understand their relative performance in relation to their competitors.
- Sustainable Value Creation of Firms reports: On the basis of the VCr results, firms might wish to communicate the unique signals that these represent to the market and the public. This content can also be added to existing third-party sustainability reports or to company ESG and CSR reports, and might be shared with investors, policymakers, and other stakeholders to foster transparency and accountability. Such a firm report would also describe the strategic roadmap of the firm. The new data provided by the VCr will enable novel visualizations tailored to make complex realities both intuitive and actionable, encouraging firms to adopt optimal strategies for long-term growth and better sustainability practices.

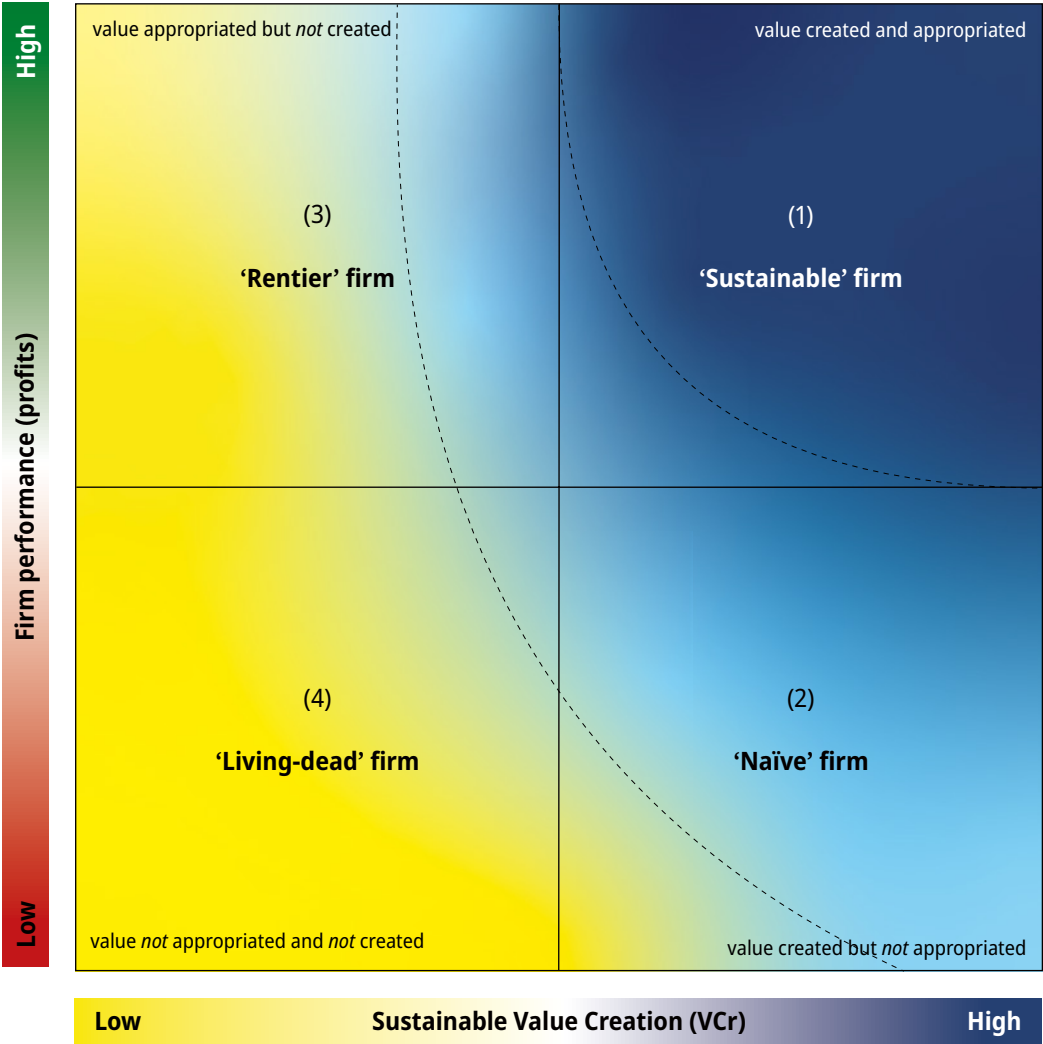
While the VCr's primary outputs are firm-specific sustainability measurements (the VCr and self-VCr) and eventually reports (The Sustainable Value Creation Report), the methodology ensures that the richness of the data opens up novel new possibilities to analyze the business model of a firm. The most fundamental of these is when the VCr score is compared to firm financial performance—that is, to a firm's profits. These two variables—the firm VCr score and firm profits—position a company in one of the quadrants of the Sustainable Value Matrix depicted in **Visual 2.13**. The classification schema of this management framework uniquely realizes the need to understand and evaluate the intricate relationship between performance and sustainability at the firm level. The diverse implications of being in one or another of the quadrants in the matrix are discussed next in this report, as are the options, opportunities, and challenges for top management and the suppliers of capital.

The Sustainable Value Matrix: Four quadrants for strategic decision-making

A firm that has a high VCr score and is profitable is positioned as 'sustainable' (quadrant 1). If a firm creates value (reflected by a high VCr score) but is unprofitable (due to the inability of the business model to appropriate a sufficient amount of the significant value it creates), it falls into the 'naïve' firm category (quadrant 2) of the framework. Firms whose business models have low VCr scores are extractive and rely on value transfers, but if they are adept at value appropriation, especially from their stakeholders (value transfer-IN), they may well be profitable and so belong in the 'rentier' category (quadrant 3). Despite their profitability, rentier firms are problematic for society at large, run the risk of losing their license to operate and are therefore unsustainable. Finally, firms with low VCr scores that are both extractive and unprofitable are assigned to the 'living-dead' category (quadrant 4). As these organizations run down both societal value endowments and their own financial resources, they are unlikely to survive.

How can suppliers of capital leverage this framework? Investors might develop approaches to support firms that are 'naïve' by upgrading their appropriation capabilities and transforming them into profitable 'sustainable' firms. This is the aim of many private equity (PE) firms. They might also assist 'rentier' firms to boost their sustainable value creation and thus secure a license to operate over the long term. Transforming a failing 'living-dead' firm plagued by debt and inefficiency (Banerjee & Hofmann, 2018; Caballero, Hoshi, & Kashyap, 2006) to both profit and sustainability is evidently more challenging. Of course, the Sustainable Value Matrix is not only designed for external stakeholders; top management teams and boards can also use the matrix to inform the internal transformation of their business models. Beyond the results of the VCr2025 proof-of-concept report, the self-assessment survey approach (see self-VCr, Section 2.4) is a confidential tool that can also help a firm to position itself in The Sustainable Value Matrix and allow it to seek transformation.

Milton Friedman’s influential article for *The New York Times* was entitled ‘The Social Responsibility of Business is to Increase its Profits’ (1970). The value creation-appropriation framework (VCA) and bargaining power differentials in the political economy strongly qualify this view. In the VCr2025 proof-of-concept report, firms, especially those running the largest residual income and reward business models in the economy (elite business models) contribute to society through *both* value appropriation (evidenced by their profits) and sustainable value creation (as evidenced by their VCr scores).



Visual 2.13: The Sustainable Value Matrix: A performance framework for management (Source: Figure 7.2, Casas-Klett, 2026)