Understanding the EU Taxonomy

The European Union has emerged as a global leader in the fight against climate change. After beating the emission reduction, renewable energy usage, and energy efficiency targets it set in 2008, the EU has continually upped the ante. In 2019 it ratified its goal to be carbon neutral by 2050. To meet this objective, the bloc endorsed the Green Deal, which intends to achieve carbon neutrality in a manner that is both cost-effective and socially just.

To better direct the billions of euros from public and private funds that the Green Deal hopes to solicit, Brussels is putting in place a number of laws including the non-financial reporting directive (NFRD) and the EU Taxonomy. The EU is erecting several pillars to fulfill the Climate Law. In addition to enacting the Taxonomy and the NFRD, the EU will codify new emissions, renewable energy, and energy efficiency targets.

The 2050 goal envisages an economy powered by renewable energy sources. More than just a means of slowing the rate at which the earth is warming, renewables are a driver of economic growth, according to the EU. The same is true of decarbonization, which the EU hopes will create enough new high-paying jobs in the circular economy, transportation, and infrastructure as well as renewable energy to offset any job losses in fossil fuels.

November 2020

The Process

The Taxonomy is a framework for determining the degree of sustainability an investment offers. To define sustainability, the Taxonomy establishes six objectives. For an investment to be sustainable, it needs to comply with at least one of these objectives and do no harm to the other five. The range of objectives reflects the richness of the concept of sustainability.

To comply with an objective, an investment needs to meet certain operational hurdles (read: substantial contribution) such as keeping GHG emissions below some threshold. In the course of meeting one objective, the investment cannot be detrimental to another objective (the so-called "Do no significant harm" provision). If an investment passes these two sets of hurdles, then it also has to be compliant with relevant "minimum safeguards"—labor laws that ensure social equity are as much a part of the Taxonomy as is environmental integrity. The EU Taxonomy is a comprehensive classification system that can be implemented only by following a sequential, multistep process. This is illustrated below.

Mapping Out the Entire Economy

As noted, to comply with any of the six objectives, a company must prove it has reached certain levels of operational efficiency to achieve "substantial contribution." This approach implies that for each of the six objectives, relevant operational hurdles and technical specifications need to be set up for *every* economic activity.[1]

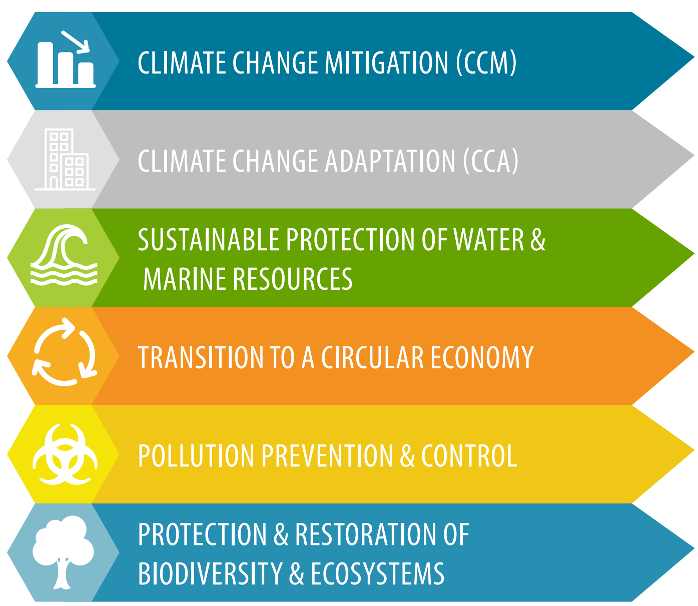
Consequently, building out the Taxonomy is an enormous task. The EU has begun by mapping the largest emitting activities and the first two objectives: climate-change mitigation and adaptation. The other objectives and sectors will be mapped over the next two years.

As part of this process, the Taxonomy drills down into the revenue (or capex) within the company associated with the sustainable activity (assuming this activity has met all the technical, operational, and legal hurdles). Asset owners and investment managers will be required to disclose the percentage of their portfolio—defined as the weighted average of underlying debt or equity exposure—that complies with the Taxonomy.

FIGURE 1 | EU'S PATH TO CARBON NEUTRALITY BY 2050

For illustrative purposes only.

FIGURE 2 | THE SIX SUSTAINABILITY OBJECTIVES



[1] This is done along activity levels rather than sector classifications. Since a company could be involved in multiple economic activities, it will need to classify its improvements separately under each of these.

Who Does the EU Taxonomy Affect?

Going forward, the Taxonomy promises to place strict disclosure requirements on GPs and asset owners who label products as sustainable, green, or ESG-related. GPs who market their offerings as having environmental or social impacts will similarly be bound by this regime. This encompasses investment managers that invest in the EU or distribute into the EU. Two pieces of allied legislation are being positioned to support the implementation of the Taxonomy. Firstly, the Sustainable Finance Disclosure Regulation (SFDR) requires investment managers to disclose their efforts to integrate ESG criteria into their investment processes. Similarly, the NFRD legislation, which currently applies only to companies with more than 500 employees, requires disclosure of a range of non-financial data points. This legislation is currently being reviewed to ensure it is aligned with the Taxonomy's data requirements, and it will probably be broadened in scope to apply to more companies. As such, NFRD and Taxonomy compliance will probably become a listing requirement, particularly for larger companies. Similar disclosure requirements are placed on EU asset owners as part of allied legislation. The NFRD legislation, which currently applies only to listed companies with more than 500 employees, also requires Taxonomy compliance. This means that Taxonomy compliance in effect becomes a listing requirement for larger companies.

As such, the Taxonomy will drive compliance and transparency along the entire ownership chain. And the effect of the Taxonomy will be felt far beyond the EU.

Climate change is a global phenomenon, and the EU Taxonomy is the first in a series of national taxonomies, each tailored to national interests. For example, Canada's taxonomy will look to adjust for the resource-intensive nature of its economy. Over time, we expect a network of allied taxonomies that will be (we hope) aligned.

FIGURE 3 | DETERMINING TAXONOMY COMPLIANCE IS A MULTISTEP PROCESS WITH A SERIES OF HURDLES

Trigger

- Fund self-labeling as "sustainable"
- Company/instrument that wants to be considered sustainable
- Identify underlying activities of company/issuer/financial product potentially aligned with Taxonomy objective(s)

First Hurdle—Substantial Contribution (SC)

- For each potentially aligned activity, verify whether company meets relevant SC screening criteria, e.g., <100g CO^2/kWh. (Note: SC criteria only exist for certain sectors currently related to objectives CCM and CCA)

Second Hurdle—Do No Significant Harm (DNSH)

- EU companies that are bound by the NFRD automatically meet the DNSH and minimum safeguard provisions
- For all other companies, there is voluntary disclosure, so investors need to conduct due diligence to ensure compliance with DNSH qualitative criteria

Third Hurdle—Minimum Safeguards

- No adverse effects on human and labor rights or corruption issues
- If adverse effects cannot be avoided, due diligence should focus on mitigation/prevention of recurrence/remediation

Calculate Compliance

- Use turnover or capex of sustainable activities (versus overall turnover/capex) to determine % Taxonomy compliance
- Portfolio % compliance is weighted average of individual assets/instruments

Process requires detailed asset-level information on companies broken down to activity level. This includes information on turnover, capex, and internal operating procedures to determine DNSH and minimum safeguards. Within private markets, the GP will be critical in providing this information or there will be a need for extensive informational rights at the asset level.

Implementation of the Taxonomy in Private Markets

The following section discusses the implementation of the Taxonomy in private markets. As has been explained above, the process of determining Taxonomy compliance requires specific and detailed information. Under the NFRD legislation, there will be a push to ensure that all listed companies above a certain size disclose the required Taxonomy information as part of their quarterly reporting. This requirement has not carried over to private companies yet, but changes in the proposed legislation may require this to be applied to larger private companies. From StepStone's perspective this would be a good thing: It would create greater alignment between the NFRD and the Taxonomy. However, it would not cover the majority of companies that we and our clients invest in. Furthermore, several data providers have begun offering services around Taxonomy compliance. These providers draw on information publicly available in quarterly reports, then aggregated into databases. While this solution works in the public markets, a different approach will be required in private markets.[2]

The following general observations can be made from applying the Taxonomy to private markets:

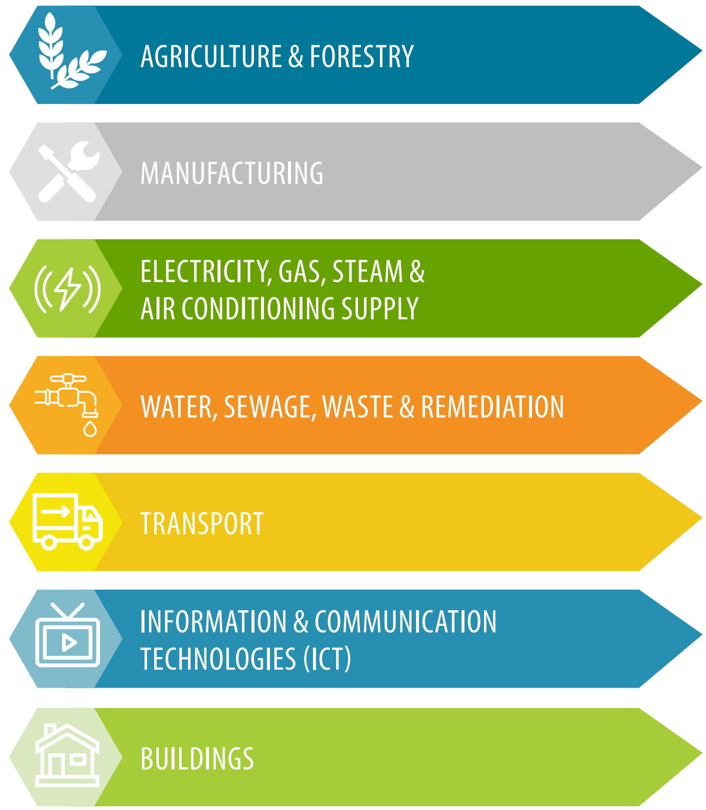
» GPs need to set up relevant systems within their portfolio companies to collect and report on the required information under the Taxonomy at an asset level.

» GPs then need to aggregate this information to create a portfolio view and report to LPs.

» GPs need to manage information rights/access with LPs particularly around co-investments.

» LPs may wish to manage their own Taxonomy calculations. This will require extensive information rights and engagement with asset-level managers. GPs and LPs should consider the most efficient approach to determine Taxonomy compliance—particularly if this information is required by multiple LPs.

FIGURE 4 | SECTORS MAPPED UNDER CCM & CCA



For illustrative purposes only.

» LPAs, side-letter documentation, etc., need to consider such required information as part of reporting requirements.

» Because LPs will be relying on the data collation processes designed by the GPs and their portfolio companies, these parties should submit to verification processes to assure LPs that these calculations can be relied upon. An alternative approach is to develop standard frameworks, which GPs comply with.

[2] StepStone is a member of the Principles for Responsible Investment (PRI) Working Group on Taxonomy Implementation. We have contributed a case study on the implementation of the Taxonomy in private markets. This case study, which focuses on infrastructure, will be published as Part Two of this series.

Undoubtedly there are costs involved in setting up the systems to gather, collate, and report on the necessary data. GPs and their portfolio companies will need to absorb these costs. Ultimately the goal of the Taxonomy is that they be well rewarded for these efforts with reduced debt costs and access to increased pools of capital. Furthermore, there may be a positive valuation impact at exit.

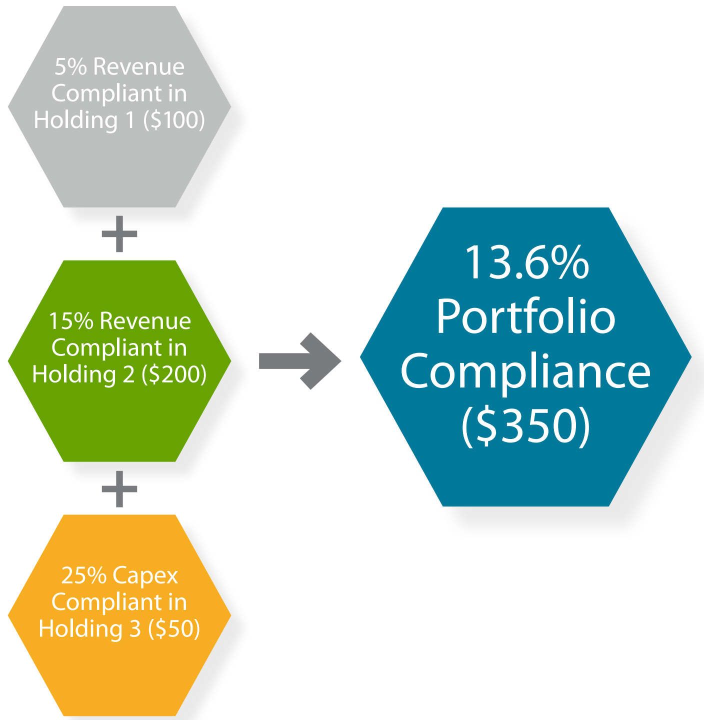
Implications for Private Markets

The Taxonomy is a granular compliance matrix. To comply with the Taxonomy, every activity conducted by a company needs to pass three separate hurdles. The companies that are already operating in "in favor" sectors ought to slot neatly into this matrix and may be 100% Taxonomy compliant. These businesses might well experience increased capital inflow for the following reasons:

1 There will arguably be a shortage of 100% Taxonomy-compliant investment opportunities given the demanding requirements of the Taxonomy;

2 In light of the Green Deal mandate, EU public funds will have strong demand for Taxonomy- compliant projects—on both the debt and equity sides;

FIGURE 5 | CALCULATING TAXONOMY COMPLIANCE OF A PORTFOLIO



For illustrative purposes only.

FIGURE 6 | REPORTING/DISCLOSURE REQUIREMENTS

DISCLOSURE REQUIREMENTS	CONTRACTUAL & REPORTING REQUIREMENTS	REGULATION
» Financial Products (AIFMs) being sold into EU with sustainable / ESG / green objectives or promoting Environmental or Social benefits need to be compliant » AIFMs under SFRD disclosure on sustainability risk considerations in investment process or confirm rejection » Companies within scope of NFRD likely to grow and add Taxonomy compliance (listing requirement) » Public funding earmarked for green projects will require Taxonomy compliance	The following groups will have pre-contractual and periodic reporting requirements under Taxonomy and SFRD: » Pension fund providers (IORPs) » UCITS » AIFMs » MiFID II » Insurance undertakings	» Taxonomy enshrined in law 2020 » Disclosure clarifications on NFRD due December 2020 » Disclosure requirements start in March 2021 » UK still to confirm if adopting disclosure requirements likely » UK pension funds trustees likely to have a legal duty to consider climate change under TCFD framework » Taxonomy mapping complete by 2022

3 Debt funding should become cheaper for compliant assets;

4 There are more LP programs focused on climate change and the UN's Sustainable Development Goals (SDGs).

Combined, this means that there will likely be valuation arbitrage on such assets, as demand outstrips supply.

The Taxonomy is going to create a defined market for sustainable assets. Capital will flow into "neatly" mapped activities while brown assets will become increasingly stranded.

The majority of companies will generally be partially compliant. The challenge for such businesses is to drive increased compliance should they determine that greater access to capital markets more than offsets the cost of Taxonomy compliance.

The Taxonomy takes a hard line on industries that it deems out of place in a decarbonized economy. Solid fossil fuels (e.g., coal) are on this list. For liquid and gaseous fossil fuels, the situation is less clear; parts of their supply chain can be considered under certain circumstances as compliant. For example, next-generation gas-fired plants, which produce very low emissions, are compliant under the Taxonomy. There are many gray areas where the Taxonomy tries to navigate transitioning the economy to a decarbonized state without unintentionally entrenching the old carbon regime.

StepStone sees investment opportunities in this gray zone. GPs will need to sharpen their skills to identify the arbitrage opportunities: Isolating assets that can be transitioned from

FIGURE 7 | TAXONOMY PROCESS WITHIN PRIVATE MARKETS

Trigger

- Fund self-labeling as sustainable or using terminology that evokes ESG/green activities
- Company/instrument that wants to be considered sustainable

First Hurdle—Substantial Contribution (SC)

- For each potentially aligned activity, verify whether company meets relevant SC screening criteria, e.g., <100g CO^2/kWh. (Note: SC criteria only exist for certain sectors currently related to objectives CCM and CCA)
- **Company Management determine SC**

Second Hurdle—Do No Significant Harm (DNSH)

- Process simplified for companies disclosing under NFRD
- For all other companies, there is voluntary disclosure, so investors need to conduct due diligence to ensure compliance with DNSH qualitative criteria
- **Company management determines**

Third Hurdle—Social Safeguards

- No adverse effects on human and labor rights or corruption issues (minimum safeguards)
- If adverse effects cannot be avoided, due diligence should focus on mitigation/prevention of recurrence/remediation
- **Company management determines minimum safeguards**

Calculate Compliance

- Use turnover or capex of sustainable activities (versus overall turnover/capex) to determine % Taxonomy compliance
- Portfolio % compliance is weighted average of individual assets/instruments
- **GP reports on portfolio level compliance**

Within private markets, GPs will be critical in providing this information or there will be a need for extensive information rights at the asset level. GPs need to work with company management to ensure relevant information is collected and reported.

GPs or company management may require process validation to provide assurance on how the Taxonomy information has been produced.

noncompliant to compliant could hold a material upside. This approach lends itself to GPs who have strong active management skills. Strategy and process repositioning will be critical. Often these businesses will need multiple years to implement their transition plans. As such, these assets are well suited to private market investors. Overall, a private market program lends itself to gaining exposure to investments involved in decarbonization.

Conclusion

Investors will be required to pay attention to the EU Taxonomy, regardless of their own domicile, because the EU is setting up the framework that will drive a repricing of sustainable assets and result in an array of assets becoming stranded (this is in addition to the regulatory requirements that demand compliance). The Taxonomy is complex because it is very detailed and, as of today, incomplete. This creates investment opportunities for investors that are forward leaning to anticipate where capital will flow under this framework. It puts the onus of responsibility on GPs to train their teams to identify investment opportunities within the Taxonomy specifically and in sustainability broadly. GPs and asset owners alike will need to invest in data collection systems like never before. Data are the key to compliance. For some businesses, this will be a huge investment. The payoff is access to cheaper debt and increased pools of equity capital, and potentially a favorable repricing of companies.

FIGURE 9 | FOSSIL FUEL IMPACT

LIQUID & GASEOUS FOSSIL FUELS	SOLID FOSSIL FUELS
STORAGE/ TRANSPORTATION • Dedicated facilities cannot be Taxonomy compliant **GENERATION** • Can only be considered if generation has low emissions (meets SC criteria)	**COAL** • No coal generation can be Taxonomy compliant

For illustrative purposes only.

FIGURE 8 | BENEFICIARIES

TRANSPORT
- Low to no emissions
- Electric & hydrogen

AGRICULTURE
- Maintaining carbon
- Improving carbon
- Farming best practices

ELECTRICITY: 100g CO^2/kWh
- Solar, wind, geothermal & hydro
- Gas with CCS technology
- Storage & transmission

WATER & WASTE MANAGEMENT
- Energy efficiency
- Adaptation

FORESTRY
- Maintaining carbon
- Improving carbon

MANUFACTURING
- Low-carbon components
- Aluminum
- Steel
- Concrete
- Plastics

BUILDINGS
- Top 15% or 30% improvements
- Supply chain / SMEs

For illustrative purposes only.

StepStone is a global private markets firm overseeing US$292 billion of private capital allocations, including US$66 billion of assets under management.

The Firm creates customized portfolios for many of the world's most sophisticated investors using a highly disciplined, research-focused approach that prudently integrates fund investments, secondaries and co-investments.

Global Offices

BEIJING
Kerry Centre
South Tower, 16th Floor,
1 Guang Hua Road, Chaoyang District
Beijing, China 100020

CHARLOTTE
128 S. Tryon Street, Suite 880
Charlotte, NC 28202

CLEVELAND
127 Public Square, Suite 5050
Cleveland, OH 44114

DUBLIN
Newmount House
22-24 Lower Mount Street
Dublin 2, Ireland

HONG KONG
Level 15
Nexxus Building
41 Connaught Road Central
Central, Hong Kong

LA JOLLA
4275 Executive Square, Suite 500
La Jolla, CA 92037

LIMA
Av Jorge Basadre 607
San Isidro, Lima, Peru

LONDON
2 St James's Market
London SW1Y 4AH

LUXEMBOURG
124 Boulevard de la Pétrusse
L-2330 Luxembourg

NEW YORK
450 Lexington Avenue, 31st Floor
New York, NY 10017

PERTH
Level 24, Allendale Square
77 St George's Terrace
Perth WA 6000, Australia

ROME
Via Crescenzio, 14
00193 Rome, Italy

SAN FRANCISCO
Two Embarcadero Center, Suite 480
San Francisco, CA 94111

SÃO PAULO
Av. Brigadeiro Faria Lima 3355, 8th Floor
Itaim Bibi, São Paulo, Brazil 04538-133

SEOUL
Three IFC Level 43
10 Gukjegeumyung-ro
Youngdeungpo-gu, Seoul 07326 Korea

SYDNEY
Level 43 Governor Phillip Tower
One Farrer Place
Sydney NSW 2000, Australia

TOKYO
Level 1 Yusen Building
2-3-2 Marunouchi
Chiyoda-ku, Tokyo 100-0005, Japan

TORONTO
77 King Street West, Suite 2120
Toronto, ON, Canada M5K 1A2

ZURICH
Klausstrasse 4
CH-8008 Zurich, Switzerland

For more information regarding StepStone's research,
please contact us at research@stepstoneglobal.com.

www.stepstonegroup.com