# Year-end party while understanding EU taxonomy

- - - 世界に羽ばたけ日本企業と日本の投資家! - - -



Digital Reporting Workshop for CG & other topic

Date and time: 18th Dec 2019, 18:30-19:45

#### EU Taxonomy, why we chose this topic?

EU Taxonomy is the main part of the EU sustainable finance that is conducted by EU Commission, to provide a definition of "Green" in EU. Under this initiative, EU commission has sought to provide investors with useful information by classifying what could be "green", and what types of activities could be a green business. Investors can use taxonomy to easily explain their clients that they are "green investing". According to the European Commission, EU taxonomy protects investors from greenwashing. But those definitions seem to be hard to achieve for Japanese companies...

Good or bad, EU taxonomy became the biggest discussion among ESG topics of 2019. After the final version was released on 18 June, it became a hot matter at several investor's events in Japan in October, and at the end of October the OECD forum also took it as agenda. At this workshop, we shared what the EU taxonomy is and how it is actually described, and understood the issues, then discussed what we should consider in the future.

Some of the attendees have been gathering each week to read taxonomy together, from this fall. 5 people selected specific sectors from the 400-pages taxonomy. The results were shared with other attendees of this workshop on 18th December.

So now, we don't need to be afraid of EU taxonomy (?!)

	workshop on
Guest from oversea	1 from UK, 1 from Paris, (financial institutions)
Attendees	24 Investors, 5 Investor organization, 1 pension fund, 2 sell-side analysts, 5 Information providers/Researchers, 2 Company side(as preparers), 4 Auditor, 7 Regulator/Accounting setter/etc

#### We read the "Using the Taxonomy"!!

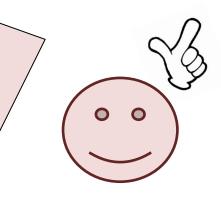
## What is "Using the Taxonomy"?

The EU taxonomy itself is a technical book, that contains environmental regulations and standards and it is written on the assumption that it will be used in the EU. I believe it is useful to understand the concept with regards to the climate change issues in Europe.

Chapter 1 defines six environmental goals that they had been set in the taxonomy process. (Mitigation, adoption, etc.) In particular, it provides details on the mitigation and adaptation , as well as on "DNSH" which means achieving the goal of reducing CO2 emissions without interfering with other activities and environmental protection. Some criticise from a bit of misunderstanding. The taxonomy inherently touches only the technical aspects. In various places, it refers to the definition of TCFD and RE100, and are integrated with them. So taxonomy could cover them together. An additional, way to use taxonomy is to define it as "a material for explaining whether one's own activity is a Sustainable Community". It defines the latest practices and it motivates everyone to catch up. In the taxonomy, there is no word of "international standard", it seems to be classified as a role of others, such as ISO. Even though some people said that "taxonomies hinder private innovation".

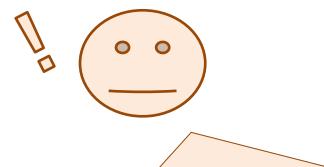
The taxonomy was written in about one to three years, and around 200 people were involved in the WG. In terms of how to use this for investment, they are trying to define a taxonomy for 175 billion euros (funds for green investment) and avoid to be used for "Greenwash".

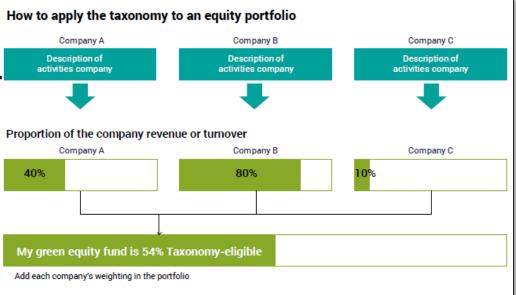




We read the "Using the Taxonomy"!!

This is "Using the Taxonomy"...





Taxonomy is used by a "sustainable fund", which can be UCITS funds, alternative funds, insurance investments, and funds managed by pensions. When using taxonomy you need to disclose this. You should express your phantom preferences and use them to determine why you own a company, design green financial products, engage with your investees, and measure the environmental performance of your fund. It helps to describe how much you invest in a sustainable industry. Once classified as a sustainable fund, the fund's goals, progress, measures and monitoring methods must be disclosed. Also, there is basically no problem to use it anywhere in the world, even though it is made for EU in the first place. The five steps in using the taxonomy are to identify activities that may be eligible first. Next, check whether the activity has reached the threshold value, third is DNSH (Do no Significant harm), that is, whether it contributes to the environment but is not harmful elsewhere, and fourth is social minimum. That is, confirm that the OECD's Guidelines for Multinational Enterprises and the UN's UNGP (Principles on Business and Human Rights) are being followed. Last is the investment ratio. The calculation method is shown in the figure. A. Taxonomy-the right percentage of sales. B. It is necessary to disclose environmental data that proves that the threshold has been cleared, and C. Management data on social issues (OECD, UNGP).

#### We read the "Using the Taxonomy"!!

#### Cases in "Using the Taxonomy"



Example of the transition finance for a non-eligible cement plant; Funding and execute the plan to improve efficiency. If the cement is not less than 0.498 g / t, it is not sustainable based on this taxonomy. But this case exceeds 0.6. However, raising funds to improve it to be below 0.498 could be "sustainable finance".

Case 2: wind power generation. Offshore wind is eligible but you need pay attention about DNSH. It is necessary to confirm that the design is robust, that the underwater noise is within the threshold, that the wind turbine materials are recyclable, and that the impact on the ecosystem is minimal.

[mitigation] 1. Very low-carbon activities, 2. Net zero in 2050, but not now it reach this criteria. 100g / kwh, 3. Other than above. Even with high efficiency, coal technology does not fit into taxonomy.

[Adaptation] Technologies required when the temperature really rises, 1. Activities to increase resilience to climate change (eg, soil moisture retention technology), 2. Activities that enable adaptation of other economic activities (eg, Satellite system for climate-related observations)

It is not enough if it were only seeking sustainable business. The goal is to achieve optimal decarbonization. Member-states, regions, cities, businesses, citizens and policymakers of the EU are at the forefront of the transition to 2050. Even in the case of power systems, the situation can largely vary. Some cities may not prioritize low-emission vehicles. You can't stay away from the system that you are belonging to. In the case of cars, it also depends on low-carbon power sources, uncongested transportation systems, battery recycling, and access to medical facilities etc.. After all considerations, it concludes that investment could be maximized. The taxonomy did not try to apply the standard uniformly, I think it is a result of discussing the circumstances and situations of each country.

#### We read the Taxonomy. -- Manufacturing



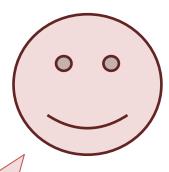


Manufacturing was selected for the taxonomy because it emits large amounts of CO2 and may affect other industries. There are two types, "Greening by" and "Green of". The former is a company that has the technology necessary to realize low-carbon society, and the latter is an example of aluminum, steel and cement, which are large industries that emit CO2 during the manufacturing process. Examples of "Greening by" are a low-carbon vehicle or a very energy-efficient building, and has no threshold. A threshold may be set in the future, taking into account the product life cycle. On the other hand, in the "Greening of", the top 10% of the best performers based on EU ETS standards are set as thresholds for each sector from the viewpoint of scope 1 and 2 for the carbon dioxide emissions during the manufacturing process. For equity investors, what percentage of investment are eligible for taxonomy, what percentage of businesses have reached the threshold, they will count only the corresponding sales proceeds. Indirect finance, on the other hand, is considered to finance the costs necessary to be eligible for taxonomy, such as project finance. In that case, it might be necessary covenants that the funds procured should be used for only taxonomy eligible business, which is certified by third parties.

As a next step, the "Green of" has two other industries to consider next: paper and mining. As for "Green by", new business possibilities, EV charging equipment and hydrogen-related facilities will be picked up. The emphasis is on the possibility of finding a more appropriate benchmark and the need to continue analyzing the entire value chain rather than just one business. We understand that we need to keep watching the standard trend, as Taxonomy should be changing going forward.

#### We read the Taxonomy. -- Plastics

The source of plastic, called "pellet," has been highlighted because it has a significant effect on Co2 emissions. No material upstream more then pellet, is in the taxonomy. I guess because EU doesn't have upstream processes. It also states that regarding recycling, material recycling can contribute to CO2 reduction. As metrics, there are three environmentally-friendly plastics. The first is material recycling, the second is chemical recycling, and the third is renewable raw materials. 1 uses plastic as it is, 2 melts it once and returns to the original material, 3 uses plant-derived material. Thermal recycling is excluded. It also states that ISO also has a chemical recycling standards, and that it should be certified by a third party. Conversely, for 3, many pages are allocated to explanation about eliminating petroleum-derived products using biomass and industrial bio-waste. They deeply care about deforestation and tell to comply with RED + or RED2 +, and they seem to impose quite severe penalties on new slashing and burning fields. There is no description of the threshold. The reason is that the company will continue to grow, must use recycling, and can reduce Co2. About DNSH, it states that consider about air, water, facilities, and water pollution. The next paragraph is requiring to pay attention to reduce climate change in only the adoption section, but the rest of the parts are telling more common issues such as pollution prevention.





#### We read the Taxonomy. -- Electricity, gas, steam, Air conditioning



It covers the construction and operation of gas-powered facilities and is not limited to natural gas. In "mitigation", gas use contributes to a decarbonized economy. The threshold is 100 kW CO2 / KW, and will be zero toward 2050, and a review is required every five years. This is tough for Japanese companies. From a DNSH perspective, there is a requirement to reduce significant climatic risks, but other challenges for power generation facilities are also important. It suggests that the construction of low water areas should be coordinated with local stakeholders while minimizing the impact on water pollution during construction, operation and demolition. Various considerations are required for waste, such as taking appropriate measures, and pollution prevention and management in terms of measures to release to the atmosphere and paying attention to "biodiversity". Three businesses use gas as fuel. One is a power generation, and the other is heat supply using gas. The latter has a lower threshold for the entire life cycle, "30 grams. Cogeneration is the multiplication. If this was to be applied to Japan as it is, gas-based power generation would currently produce LNGfired thermal power of 470. Co2 / KW. Also, there are various calculations for gas heat supply. In the case of city gas, the average is 180 cubic meters CO2 / KW. Japan is also in a very difficult situation in terms of gas.

#### We read the Taxonomy. -- ITC, Dataware house



The data warehouse was chosen for this carefully selected taxonomy because the data industry in the EU has a significant economic scale and consumes large amounts of electricity. 5.8 million people work in the IT industry, accounting for about 10% of European power consumption. So the power consumed by this data warehouse is a huge impact. Taxonomy refers to the JCR for technical explanations which were issued 2012 (not this time), to link to the description of data house's environmental regulations. In other words, the taxonomy might be helpful to organize several different rules. It might be surprising for the people in other regions where the rules are different, and it may be standard for EU companies. Another reason the IT industry has selected as taxonomy is that it expected that it would help save electricity. At the EU Sustainable Energy Conference in Brussels in June, most of the booth exhibitors were IT companies that provided smart grid systems. Taxonomy seems to expect using IT technology to minimize energy consumption and optimized EV quick charging etc.

#### We read the Taxonomy. -- Transportation



Transport consumes one-third of the EU's total energy (oil-derived) and accounts for one-quarter of EU emissions. Despite having been viewed as a problem since 1990, demand for transportation has grown and low-carbon solutions have stagnated. Across different transport options, emissions from land transport or two-thirds of transport account for almost all passenger cars and vans, and trucks and buses for the rest. Transportation accounts for 30% of the additional projected investment of 175 billion euros required for low carbon. It is crucial to reduce GHG emissions, but the EU already has legislation limiting emissions from land transport. The railway and river transport is not very strict and are subject to taxonomies, but there are not many descriptions.

The EU already issued a "greening operation" guideline, followed by guidelines on transportation. Hence, there needs to be cooperation between 4 industries. Manufacturing increases the number of low-emission and zero-emission vehicles, and the energy industry produces low-carbon or zero-carbon fuels. In the IT industry, digital solutions must use to realise highly efficient transportation systems, and in the infrastructure industry, it is impossible to reduce overall transport CO2 unless creating better infrastructure.

The thresholds are classified into three categories according to the EU's "A Clean Planet for All". The first is emissions. Co2 emissions are recognised as sustainable up to 50 grams by 2025 but must be zero after 26. Electrification of ships and de-carbonisation of power sources must be promoted. The second is the substitution of net zero carbon fuel. Third, improve the efficiency of transportation systems. It assumed that vessels that use heavy oil are probably not sustainable. According to these statements, railways that are usually said to contribute to the environment may not be called Sustainable.

#### SYSTEM LINKAGES BETWEEN TAXONOMY SECTIONS FOR TRANSPORT MANUFACTURING **ENERGY** CONSTRUCTION ICT Production of: **Energy Carriers:** Provision of Digital Construction of Road Vehicles (Clean Vehicles and Electricity Solutions: Infrastructure: HDV CO2 Directives) Hydrogen Enabling avoidance of transport Rail / urban public transport fleets Biofuels/Renewable E-Fuels (RED 2) Enabling utilisation of low carbon Inland waterways Inland waterway fleets transport Fuelling infrastructure Charging/Fueling equipment (transport ICT criteria to be developed in future) Greening by TRANSPORT Greening of Transport Operations (Fleets and Associated Infrastructure) Mitigation Option Reference Section Taxonomy Approach in EC Long Term Strategy Low- and zero emission vehicles, 4.4.1.1 Eligibility of zero direct emissions fleets and low carbon fleets vehide efficiency and (reference to CV and HDV CO2 Directives for criteria on road infrastructure The use of alternative and net-4.4.1.2 Eligibility of fleets exclusively using bio and renewable e-fuels in zero carbon fuels certain modes (reference to RED 2 for criteria on fuels) Improving the efficiency of the 4.4.1.3 Encouraging modal shift through consistent threshold approach transport system across modes (a greater proportion of rail, public transport and inland waterway operations are eligible because of lower carbon intensity therefore facilitating investment in these 10 ICT solutions (not currently included)

#### Discussion!!!



For plastics, I am a little worried when I heard that the EU doesn't recognize that any upstream material (products) than the pellet. It said that three methods selected as valid, but there might be a fourth way. In case the EU stakeholders didn't know the fourth way, even though the fourth is important for globally... It could be a risk

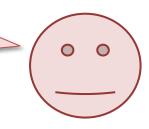
Wouldn't it be good to proceed in a way where the fourth and fifth were unduly suppressed?



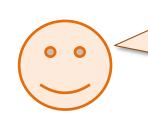
Japan's strong point on thermal recycling and reduction technology are both ignored. Half of Japan's plastic recycling is thermal recycling. We also have progressed in reducing the weight of pet bottles. But these are not covered. Discussions are only renewable raw materials from the first place. The renewable raw material made from sugar cane via polylactic acid. The US food giant Cargile dominate the market and Japan can't get inside.



I think the EU has always imagined the ideal future and prefers more desirable technologies in the taxonomies. In EU, the idea is to realize a circular economy, and we believe that if we can make 100% biodegradable plastic, we can approach the ideal circular economy. In Europe, with this idea, I think thermal recycling is questionable because it uses the money to burn it. Overall, it looks like they have chosen the technology to provide Co2 zero as their final product. On the other hand, it is essential to note that it doesn't mean to enable to finance even if it does not categorise as sustainable.



How about Nuclear power plant?



Taxonomy has the aspect of making industry growth, seems to motivate companies to be clear the threshold. When I visited an EU company, I asked them about the taxonomy and got an answer, "I don't know much about taxonomy." Financial institutions are excited about taxonomies first, and industry side seems to be coming later.

#### Discussion!!! Cont.



#### Is there any penalty?



Taxonomy has no enforcement for the industry. If you have taxonomy aligned assets, you could be a green investor. Sustainable Finance has ten action plans, one of which is "strengthening investor responsibility". Investors in EU must report, strengthened report about their portfolios. In other words, if you are not eligible taxonomy, you may find it is getting to be challenging to make an investment.



How much assigned for this capital in the overall market money?



In the first part of the Sustainable Finance report, the EU states that greening costs about € 180 billion a year. They calculated it through the back-cast method and showed the taxonomy where private funding is needed. There are various ways such as the tax benefit, but private funding is needed now to achieve goals to reduce Co2, And taxonomy is its a framework.



What about return? If our fund's performance is damaged by taxonomy, how could I take accountable?



Everyone should say that. But that is why the EU amended other different regulations related to pensions, insurance and banks should be regulated to allocate their investments under "investor responsibility". On the corporate side, the "Green Deal" announced a few days ago is likely to be some sort of enforcement.

#### Instead of our conclusion...

#### How should we deal with the EU taxonomy?

"What I thought about reading it was that EU commissioners are really cool. I also felt that their ability to mobilize a variety of professionals was high, leading TCFD and other initiatives."

"I had often talked about taxonomy before, and some people refused to hear it. However, some people welcomed, so their reactions were extremely separated. When we read it, I recognised that it is not so aiming for such a clean and pure world, and not thinking only about EU member states. (But they might be thinking "EU first" a little bit...) Having also some dilemmas they have been discussing this issue, again and again, for long. So taxonomy may be also helpful for Japanese companies, it is desirable to engage in discussions while trying to determine what is at risk."

"It reminded me that climate change has a financial impact and that we have to deal with it. Even for crops that didn't take up this time, I think that the risk is gradually increasing in Japan as well. Also, from the perspective of disclosure, as an asset management company, we have to say that our fund is also very green, and we will surely see something like a green ranking. If our funds in Europe to be categorized based on green standard based on taxonomy, we need to think about this issue more seriously. "

"When I went to Paris in September for PRI in Person, the debate on taxonomy and sustainable finance grew, and I felt again that this is about investor and finance. We are a leading player. Usually, a company become a subject of this kind of policy issue, but this time, investor become subject. We need to think about it and take action in our responsibility."

### Discussion should be continued!!