

Transcript TEG Transport Workshop 27 March 2019

Light passenger cars and commercial vehicles

Proposal for setting threshold for LPC and CVs

- reason clear definition of clean vehicles (logical reference point for taxonomy).

covering taxonomy proposals
follows clean vehicles directive thresholds.

Questions:

:

1) usability: understanding what the thresholds need to do: can you give us a sense of how this will be used, and around if there will be legislation and required any, what is the point of having a taxonomy on LPC and CVs, what is this going to drive through investment?

On usability – regulation is about disclosures, it's not about behaviour. The regulation outlines disclosure requirements for those who claim they are putting green financial products on the market and have them disclose on how they have used how their methods relate to the taxonomy.

in that sense, the ambition level of the proposed regulation, is rather modest.
it's not forcing any investments in any direction, it's just requiring disclosures.

you could argue about added value, but TEG's task is to take into account existing legislation where we think that legislation has ambitious thresholds that you can say are consistent with what the taxonomy is trying to achieve. In this case, we have deliberately chosen to go for the CV directive not the Light duty directive, because the CV directive is more ambitious.

This is pushing boundaries compared to the more mainstream legislation, so these are more ambitious than what car manufacturers have to live up to.

The clean vehicles directive is based around procurement requirements for public authorities, there's a logic in having ... on what should be financed.

Swedish rep (second row from left) second seat.

Climate thresholds, will vary over time, how will this be used, it's important that things happen from start and... question on updatability/review?

: regulation as proposed is having an updating function into it. This is captured in article 15, where the proposal is to set up a sustainable finance platform which will advise the commission on a regular basis about updates, where they need to be done, and propose how they can be done.

It is by design, a dynamic instrument. The regulation and the taxonomy is a dynamic animal, and that means that the thresholds will be change over time. It may mean that new economic activities will come into the taxonomy, that we can't foresee at this stage.

That some economic activities that are in now, may not be there in 10 years time.

What we're trying to do here and now, is a proposal for a starting point for the taxonomy. Advising the commission on a starting point for the taxonomy from a technical perspective.

[REDACTED]:

You'll also see that in this proposal and other proposals we've specified next step... Where it's possible we'll add that into the report. There will be regular reviews. Have a built in short term trajectory. Legislation has done it.

Second row, 1st seat. [REDACTED]:

Impact of biofuels is not taken into consideration here.

Because you refer to it, agree that zero tail pipe emission cars where there is trajectory of getting greener should be eligible here, but my question is that by making taking the CO2 fed regulation where there are different portions and thresholds for certain cars, and individual numbers for certain cars, maybe there could be a pathway for future development to review on the CO2 regulation... ?

for some kind of put those regulations together, because that's one of the driving factors for us.

Was a discussion on how to implement alternative fuel regulations that would have an impact not on Wp? Railways... how can we incorporate this into the thresholds...?

- maybe taking into consideration other regulations, not just car directive or clean vehicle, only that might make it more flexible in future.

in first five years zero ems cars are fine. If fuels become cleaner, could they be allowed?

There needs to be a pathway to keep it open, don't close this door now.

[REDACTED]

when it comes to biofuels, TEG has acknowledge as important issue, difficult issue. as you've seen from slides – will be discussed.

What we feel is that the most realistic outcome today, is to try and identify some options, with the help of the commission staff, familiar with RED 2 directive, which outlines criteria and definitions of biofuels for transport etc. and how we can use that to interlink with thresholds here.

or at least capture it somehow.

We're quite open to this. It's just that we don't know yet how we should phrase it.

[REDACTED]

LGVs – tailpipe measure is an imperfect metric, that's just a proxy for LC or well to wheel emissions.. okay to live with that for next few years,

but the concern, but what's the ambit of taxonomy in terms of global investments, 3rd countries outside of EU, the post 2025 criteria is irrelevant.

I don't think it makes sense to focus on tailpipe emissions.

If we look at criteria right now, an investment in EVs in China, would consider them greener than 60g/km in same country. Decarbonisation of china trajectory nulls idea of labelling these vehicles greener.

Is there extra EU criteria for this, or other subsectors as well?

[REDACTED]

on the Point of life cycle emissions, we haven't included life cycle aspect because the

directive regulations we refer to is explicitly saying those damages will be addressed when there is a harmonised EU methodology. We are pointing to these legal reference points. Wouldn't be modest to think that we can do in 3 weeks something that will take 4 years.

█: Applicability beyond EU. Important point, what's going to be difficult is to (impossible), have separate criteria for EU/Non-EU. The EU cannot be seen to be setting regulations for outside of Europe.

█: Sure, but taxonomy will apply to financial instruments that applies to extra EU assets and services.

█: where we set criteria on what is happening in Europe, there needs to be a recognition in our report that if that is not applicable outside of Europe, we should identify that. Alternative approaches can be taken for those that are trying to determine green outside of Europe.

█: we can't regulate a Chinese car.

█ no, but we have to recognise that electricity grid outside of Europe won't decarbonise as quickly as Europe. So the argument on the principles which the tailpipe hinges is void.

█: WE can't regulate their energy transition speed.

we set a threshold on European policy objectives.

but if you want a supply chain that reaches into other countries that reflects local markets, and you can decide if you want to meet European or local standards. This tool says you have the option to follow it or not.

you can say that you followed EU Taxonomy, and investor can identify and disclose that. or you can that for part of operations you did not.

still a coherent approach. Might complicate things, but alignment can't be done simply, it will be its own discussion.

second row left, first seat:

Taxonomy is an adjustment on whether it's sustainable or not.

investment in 60gramme gasoline car, is getting enough support here.

investment in a better electric car here would get a sustainable sticker.

in the end, it's a question of fuel. Is it only the technology that judges if the product is sustainable, or is it the package?

█
What's important is to state within the rationale, that the basis for this proposal is on the current situation in Europe, and it may not be applicable because of decarbonisation of grid, it works for Europe, but for other reasons it may not be the case.

Just flag it.

At least people outside considering investments outside Europe can understand the caveat. That's as far as we can go.

2row 1st seat (don't have name): fuel technology and usage judges sustainability. Clear pathway for greening the grid. Emobility has a clear pathway for getting there. others should have an option of greening their fuel, by having an impact on whether a technology can be sustainable or not. The package could be taken somehow taking the LPVW threshold is easy to use, but it keeps out other portions of the reality.

EC colleague next to [REDACTED]: broad complex assessment, but we have to work with acceptor procedures and values, that's why we are developing these proposals. looking ahead that could change. Limited by data and usability.

[REDACTED] stress that thresholds and criteria outlined here are as technology neutral as they can be. We aren't saying a specific technology is preferable here. We're talking about thresholds....

.....

It's a performance metric. This is how EU legislation works.

[REDACTED]/JRC:
ruling out vehicles with 0 grams after 2025. Meaningless...

[REDACTED]
We've discussed that issue before, we're in the context of a proposed EU regulation. TEG has a mandate to try and come up with advice on how the technical bits can work in the EU context.

I don't feel that we are in apposition to go back and change our mandate, Aware of outside EU issues. Sure that we will reflect on final report.

[REDACTED]/JRC:
building on comments from before, take into account evolution of EU regulation after 2025, rather than including a sunset clause on 50 gram vehicles, 0-50 now, but in 2025 we can review.
0 gram tailpipe is a bit of an offence.

[REDACTED]: this is an EU legislation, clearly states that from 2026 onwards, only 0tailpipe is eligible under that. WE've chosen to point to that referenece point to inform the thresholds of the taxonomy.

This and in the written comments we've received, we have not seen major objections from stakeholders on the principle approach.

As rep of commission, the clean vehicles directive is one refernce point we've chosen for this discussion.

CNH rep ([REDACTED]?): tech neutrality is not an example, it's very clear is not tech neutral... second point- how advance is our market and open to threats of other markets.

while doing this we should not forget that here.

3rd point: cleavn vehicle directive – low emission concept, definition of low emis vehicles, should be extended to at least 2030 how it is for CO2 legislation, we're talking about

difference between LGV and passenger cars, we're not expecting same level of technological advancement.
Stated in written comments.

[redacted]: process answer: all legislations that we discuss now, has undergone impact assessment. what will happen with taxonomy legislation any delegated acts will be subject to review by commission?
cannot solve this now. Part of the machinery we have.

When it comes to light duty vehicles, could you, in writing please send again.

[redacted]: freight transport services by road -
As outlined by webinar and material – we propose to start from reference point of heavy duty CO2 regulation for heavy duty vehicles. Because it outlines clearly the thresholds which we think are useful for the taxonomy context.
as you can see, there are definitions for zero emission heavy duty vehicles that emit less than **1 gram CO2/km. we would say that they are eligible for inclusion in taxonomy.**
copy paste of regulation – low emission heavy duty with less than 50% reference CO2 emission in same subgroup are eligible. Between 7-9 classes of heavy duty vehicles.

Data will be available on this as of next year.
We know that the appropriate data will come online, there will be a strong usability case for this.
The last point, fleets of vehicles dedicated to fossil fuel transport are not eligible.
mitigation an activity that is undermining mitigation is not eligible. – could have a discussion on what is predominant, but will elaborate on this later

[redacted] (Sweden): strict goal for CO2 transport. Electric vehicles for heavy vehicles longhaul, is a problem for current state of battery. Question of e-highways has come up.
Zero direct emission vehicles, and you mention electric there, that includes vehicles that can be used for e-highways because that's going to be more common in the coming years before 2030.

[redacted]: we will have noted that comment before, and it is included in that definition, we can make it more clear.
maybe also on the infrastructure part when we reach that. But we have seen that as part of the definition here.

[redacted]: As mentioned for heavy duty, difficult for going electric, you have to explore alternatives to going to low emissions.
there are dedicated emissions for low em fuels?
For long distance routes you need to look at a broader spectrum.

[redacted]: Threshold could capture that situation.

[redacted]: are they tested?

zero emissions . low emissions vehicles, less than 50% of a reference point.
So if these fuels meet that threshold, they would be in essentially.

This may come back in the biofuel discussion on how we capture this.

T&E: 50% figure. There are 9 subgroups under the Co2 regulation for trucks, and we'll know the average values from the end of 2020, and subtract 50% from those 9 subgroups.
Wouldn't it be simpler to have a grams/tonnes km threshold in the taxonomy.
25grams/tonne kilometre.
light duty vehicles, this threshold would need to go down to zero. Recommend zero gram threshold by 2025.

: we thought about this, moving to other type of metric here, remove from philosophy of trying to stay as close to EU legislation, that's one argument discussed.
possibility to have the data, on that scale. We know that on the thresholds proposed here, we will have data online, a year and a half from now, free of charge for use.
we are not sure that conceptual point of view that switching to another metric, and uncertainty around data would be strong enough to change the metric.

CNH: alternative fuels, the clean vehicles directive, there's a mention to alternative advanced fuels, take this into account, it would be good because we can take into other dimensions.

: outstanding issues to be sent to .

: Move on to biofuels issue.

Won't solve this today....

Collectively become wiser here.

Don't want to observe the RED2 – joined by commission.

definition of advanced biofuels.

Commission colleague: complex subject legislation reflects complexity.

biofuels such as other renewable energy carriers, are counted and promoted under RE Directive. Target for overall share of renewables, for 2020 extended to 2030. Specific dedicated target for renewables in transport.

With respect to biofuels, there are several different layers for different types of biofuels.

All biofuels must fulfil sustainability criteria for eligibility in any type of support.

Or counted against, meeting renewable energy targets.

Two types of criteria:

protect highly biodiverse areas

protect areas with high carbon stock

Ensure minimum DG savings...

50 for new systems, old systems capped at historic levels.

for carbon and biodiverse land criteria.. capturing direct effects, so only areas where biofuel feed is produced.

Indirect effects of biofuels, this is concerning conventional biofuels, created by food and feed crops.

conclusion of assessments – indirect effect would come from market effects creating demand for feedstock would have negative effect depending on feedstock. Quite negative.

Quantitative limits produced to the amount of conventional biofuels counting towards RE targets. 2015 set at 7% of energy consumption. Refined for the future, to the level which is based on the actual consumption of those fuels in 2020. Which is the year of calculation of the 2020 target.

member states should be able to keep that for the future, and would be allowed to count 1% more towards RE targets. This would be equal to the 7% cap we counted at.

Refinement of the rough approach we had for 2015 for 2030.

Further, this does not mean there cannot be support for the directive, applies only to what counts for the directive.

Further other refinements, look at factories same for all kinds of fuels. Part of new energy directive that the contribution of high-risk biofuels, for which significant expansion of carbon rich land should be phased out after 2023? Frozen at 2019 levels. Reduce incentive for member states to have those fuels.

Idea is that even if we have a crop.. if you avoid creating additional demand, by using productivity or land, you won't have this ... effect? This should not be affected by this.

The commission was tasked to set out criteria and delegate that which identify those high ... risk biofuels...

Commission has adopted delegated act on March 13th, scrutinised by Council and Parliament.

both can object to delegated act.

This summarises the framework –

For conventional biofuels, we have policy on sustainability and standard setting.

For advanced biofuels, there is policy to focus on support under RED.

Introduce specific obligation in the member states, require member states to promote renewable fuels in the transport sector, all types. Focusing on those which have the highest potential to save emissions, includes Renewable electricity, and also sets a minimum share to be achieved by the member states, we have an obligation on the contribution of advanced biofuels.

Increasing as of 2021 to 2030.

from 0.2% to 3.5% after double counting.

So the actual energy shares are only half of it.

Advanced biofuels are defined based on a list whether they are produced from a list of feedstock,- annex 9 part A of directive.

protect investment for conventional biofuels, give member states more flexibility to focus on those with the least concern and not expand those.

focus on promotion of other more sustainable alternatives, advanced biofuels and electrification.

[redacted]:

Group on advanced biofuels, should be considered safer.

conventional biofuels are in the mix but will be subsequently capped.

capped, not a decreasing cap but some will be phased out.

- Co-chairs need to discuss and then report back to the experts.

- We will come back with some options.

[redacted] ICCT – Focusing on advanced fuels because need a feedstock approach, tech neutral.. little effects on food based crops.

second comment – lignocellulosic waste included in annex 9 part A definition, could include stem wood and pulp logs, and there is a study that there is a big carbon debt on this feedstock.

Another consideration out of RED 2 is displacement effect of some of these waste feedstock. Waste might not be a waste. Crude tall oil is burned on site as a fuel. The paper plant, might be using petroleum instead.

[redacted]: advanced biofuels could be one option with some tweaks to annex 9 list?

[redacted]: yes.

2nd row 2nd seat (don't have name – Swedish auto import association?): including it for passenger cars as well?

[redacted]: trying to get our heads around biofuels, and how they can play a role and how we can capture biofuels in the transport sector.

across the board...

we're not making any LDV/HGV discussion. But what types of biofuels could be in a clear way, eligible for inclusion in the taxonomy. Guidance from RED2...?

[redacted]: lot of work on RED2, in dealing with biofuels, how do we meet criteria, GHG reductions... this is a basis to start from, we don't have to do this discussion again. But we can make a distinction on whether we include conventional biofuels or not.

if they are on the market they need to fulfil the criteria.

They aren't necessarily bad, but there won't be any growth in the market in future.

Taxonomy could only focus on areas we expect growth.

not saying conventional is bad, but just look at what we are saying is going to grow.

comment from ICCT, hard to say if you use for biofuel and not using it for bio in a different way.

we can't pick between different types of energy forms – because then we'd have to look at system level and it becomes very complicated here.

█ : we've covered road transport in part 1.

Part 2 – cover passenger/ public transport and rail. And infrastructure associated with that.

Part 3 – focus on water based transport.

unlike road transport, where we presented the proposal to you. This is the first time we've discussed some options and proposals, expect we won't conclude all discussions today, the options to be presented won't necessarily be in final report, but these are for getting feedback reactions.

Will present this in three stages.

proposals are similar, and putting similar thresholds and criteria.

Then we will look at freight rail, then infrastructure.

For road: we don't have existing legislation in Europe for defining what is a clean fleet.

That may be a disadvantage, but allows flexibility to think about and overcome issues from first discussion.

one point we have made in outset, and proposed so far...

we've looked at zero direct emissions, put forward proposals on direct emissions.

We should consider tank to wheel or rail to wheel.

Don't have that distinction...

key difference – what we're trying to do in proposals is think about two aspects on mitigation.

1) efficiency/emissions associated with fleet types.

take account of modal shift element. – incorporated in options we are looking at.

Proposals of passenger based section.

Passenger rail transport: two options:

1) gCo2/pkm

- zero direct emissions rail fleet is eligible.

large degree of electrification of rail systems – average emissions for rail in EU, are already below proposed threshold proposed in option 2.

may be justification in going straight for 0 direct emissions rail fleet is okay.

2) incorporate second threshold which is set to below 50g/pkm until a certain period in time, until 2025.

- Looked at average for diesel in Europe putting a threshold which is higher than average in Europe so we screen out most of diesel rail in Europe and allow certain proportion which is most efficient.
- Goes back to discussion on inside/outside Europe. second option allows for better usage of criteria outside of Europe.
- 50g/co2p – inline but lower than average car emissions.

Skipped freight

Urban and suburban land passenger

proposing the same two options. Either zero direct emissions threshold. Or to set a 50grams of Co2 per passenger KM until a certain period in time.

Thought about looking at diesel busses,

most is electrified, except buses. Would exclude most diesel buses in Europe.

But would allow some flexibility for hybrids for some period.

Same options as discussed in passenger rail.

Interurban scheduled road transport services of passenger (buses).

only one option – for this mode, there isn't necessarily a zero-tail pipe emission option.

to put that as a single threshold would essentially mean nothing is eligible.

going with 'option 2' for passenger rail and public transport. On the basis that this is significantly lower than average car emissions.

Would be reviewed over time.

Wouldn't set an additional time for others.... May not be an option for 2025.

need to be more flexible and reviewed.

Regarding 50g/pkm – feasible – how is this calculated?

is this daily average, yearly average,,so this needs to be reflected in some way in the metric.

would assume this average of the operation of the fleet.

included in the definition.

needs to be a broader average, yearly one. Otherwise seasonal doesn't make sense.

welcome the approach, in option 2, is it stringent enough to screen out diesel public transport, but flexible enough to accommodate certain cases.

Metric should be simple consistent comparable and non-restricted to road...

Call attention that there is no relative threshold for...

Doesn't require Co2 savings,... ? we welcome that because on international baseline the emissions baselines, are arbitrary.

the incorporation of 50g incorporates the concept of modal shift.

UITP: regarding option 1 for urban passenger transport:

doesn't restrict what you can fund.

Option 2 is a far better approach, regarding the accounting, there are clear standards out there, ISO standards, GHG protocol.. there are mechanisms there.. which our members use to report their green bond investments.

issue on CO2/pkm, objective is to have MORE sustainable transport, that will reduce the Co2/pkm.

: Agree that we should have the two thresholds, one for zero direct, one for the

threshold for 50grams/co2. Improves motorisation..?

[REDACTED]: ICT work. Buying green issue:

This application may work for ride sharing, and those interventions.

Does this investment work in encouraging ride sharing...

could result in greening of NACE code, this activity.

will this threshold encourage that kind of investment...?

[REDACTED] ICT meeting – suggested that group may need to set high level principles around digitisation including greening by, and there will be additional work needed. Transport sector has not dealt with some areas around ICT. In short, need to work with ICT, and make sure we don't exclude certain types of ICT applications.

[REDACTED] four passengers instead of 1... definitional aspect of what is public transport. some municipalities use ride sharing and on-demand services as public transport.

[REDACTED] think about whether that fits in here or further code/category.

1st row from left 1st seat (don't have name):: two options would encourage things, consider modal shift. General support...?

[REDACTED]: Used to do TFL model, 60g/pkm, by 2025, it will be below 50.

TFL procures for green bonds on system wide approach, not vehicle approach. We need to encourage that here.

[REDACTED]: if you low the emissions or cars, will be possible for rail.

regarding interurban transport. Preference of zero emissions, but if we allow for zero emissions it should be lower than currently used standards, prioritisation of the investments. ..

[REDACTED] Urban and suburban passenger land transport – if we accept lower emission, it should be below the European standards.

[REDACTED]: What is the European standard?

[REDACTED] set standards for 2022....

[REDACTED]: Tank to wheel, well to wheel question?

from my perspective... if we purely look at the direct emissions, we need to be careful that it's not letting in fuels with significant upstream emissions.

Thinking about LNG.

Understanding is that in shipping it's not clear cut with upstream emissions.

not sure if it's a problem in land transport. Should we be looking at thresholds from a well-to-wheel basis.

[REDACTED]: Need to look in the whole well to wheel because otherwise they are comparable to fossil fuel...

We see a lot of grids running on biogas, if you only look at the technology as natural gas technology, you kind of rule it out.

how do you deal with this combination of fuel and technology.

question shows the problem here. We have to look at the whole system. Because that makes it very difficult to look at those thresholds generally. How can you get the figures to discuss the financials?

we already had this discussion about biofuels, where they come from and what can you use the biomass for.

What you've written is you come back to 70% of the electricity is going to be from decarbonised sources, so we have to look at all sources. We're here for the climate issue. I don't think we should discard anything when we look at what is the best option. I think you have to have some kind of eye on the well to wheel, including electricity also.

this is going to be problematic.

It is why, the whole issue we are discussing in is problematic, especially in transport... We have to consider what is green and what is not.

you have to have well to wheel figures.

: options for freight rail transport.

mistake in the Friday version – one of the options, was not what we wanted. Presenting here is the first proposal.

two proposals: first one is only zero direct emissions rail is eligible. There's an additional criteria when looking at freight, mentioned in road transport. Around dedicated transport for fossil fuels, wording slightly different... need to discuss this...

Rationale for this option, in terms of zero direct emissions, is the same as what we described for passenger rail, high level of electrification in Europe and that we could already realistically set a threshold or a criteria that specifies zero direct emissions rail is eligible other forms are not.

Issue around fossil fuels feedback from calls – initial proposal was to set a percentage, if it's above 50% transport of fossil fuels, it would not be eligible. Usability issue was provided as feedback.

Fleets- you don't know how locomotives are used. Wagons are dedicated for fossil fuel use.

Simpler approach, if a rail fleet is dedicated for fossil fuel transport it's not eligible, so we can take out 50% rule.

Second option: same basis as passenger transport but different result. Considering modal shift argument. When we compare performance of even diesel rail in terms of freight, it's significantly lower than road freight.

All freight rail transport, is eligible, for a period of time. But to be reviewed regularly, we understand that emissions from road freight will decrease over time. There will be that modal shift benefit. Don't set benefit, any rail transport is supporting mitigation.

█ : remark on fossil fuel and complete fossil fuel, how would you deal with the blended fuels?

- Maybe only look at unrefined/raw product?

█ : JUST LOOKING AT THE FLEET.

█ : It's not a point we feel very passionate about, but there was a report that expansion of rail is not enough to create modal shift. Expanding rail is not green . investment itself is a topic of further investment .

█ : we need to understand, the development of rail infrastructure, is an enabler the expansion wouldn't be modal shift, the modal shift will come through implementation of policy. It's not a per-se , but we need to look at the system..?

█ : system approach, so what type are we discussing here. Is it new vehicles? Services? It's not infrastructure. From a logistic market rail is part of the chain, so it's not just rail, it's also the road. What's the type of investment that we are looking at.

CO2 emissions per tonne KM. Reasonable, but is that available these figures, you've proposed zero direct emissions...

I fail to understand how we should use this.

Is it to buy a new diesel engine, is that part of this?

█ : how we would use it (perspective); we work on a project basis. This is about supporting investment in new rail fleet that meet this criteria. It would need to be thought about differently if you're thinking about equity investment if you're looking at a company, as to what that would mean. If you look at it on a company basis, it's not saying the whole company is eligible, it would depend on certain aspects of what they do, certain activities of that company would meet the criteria of the taxonomy.

Trying to design something that fits different purposes, the whole usability work, that's why it's important for making it usable in different financial instruments.

█ :
option 2, is interesting – all freight rail transport is eligible...takes into account differences between freight rail and freight road.

█ : For modal shift reasons we would also support the second criteria. if you want to support rail in the end as a sufficient means of transport.

█ : modal shift is one thing, but we have to go back to why we are here. That's for carbon dioxide, you are right, this will evolve, road transport will get more fossil free, the modal shift will be possible for other reasons but not for carbon dioxide,

it's a bit too easy to say that ahh it's modal shift then we can go for option 2, as you say, your projects can be to buy vehicles for rail, but then you'd ask why don't these vehicles have zero emissions from the start, as we do on the road.

█ This is subject to review, the extent to which the road fleet will decarbonise, this will have to be reviewed. The heavy road transport is based on fossil fuels, so there's a big difference in emissions, from road to rail... the discussion is about ...? we can exclude or include.. if we exclude and penalise a sector that is greener as of today. we don't have for passenger transport, because we can take into load factor and discriminate on emission/efficient systems? From that perspective we would prefer option 2....

█ : if we go for option 2, it would need to be reviewed regularly.

█ what would be the average time of a diesel stock?

█ 30 years... it's a good point. There's a question here about lock in. You're investing in something that will be there for 30 years but in 10 years it might not be eligible.

█ : If we're talking about 0 emissions, we're talking about electric. But in the end it doesn't make sense to electrify. We're talking about now, and we're talking about the next 5 years, it doesn't always make sense to electrify everything. You need flexibility for electricity to function. You would be redirecting investments from the transition pathways...

█ : Maybe try to bring in a threshold, so we can have a level playing field. So by bringing a threshold.

LUNCH – and then infrastructure.

Sea and Coastal Passenger water transport.

CO2 emissions per passenger kilometre

Design and operational options. Different indicators, one thing we're conscious of is different needs in the market where performance is assessed. When looking at projects, everything is ex-ante, and it's sometimes difficult to establish how a ship is used. If we know how it's used in first couple years it may be sold in a different way.

Need to have an equivalent level of ambition if we do that.

█: keep the zero direct emission ship, and to have a threshold.
how do you demonstrate modal shift – with passengers, one type of shipping of interest is ferries, do not have a land equivalent, so they will not be eligible if we get into modal shift.

When we get to freight – the potential between modal shift rail and coastal shifting, is greater than between road, or air. So there will be a problem to demonstrate this anyway. We're discussing new ships, or rebuilding with new motors. And then it is difficult beforehand to know what will happen.

As I know that for ferries, for instance, there are a lot of discussion about electric ferries for rather long distances.

Heard in Katowice, that (inaudible) talked about 3 hour travelling times, would be possible to have electric ferries. Possibly some kinds of hybrids.
It's coming so some kind of threshold... but if you have some kind of smaller thresholds, that are electric from day one, should be eligible from the start.

Don't think that modal shift should be the most important part here.
We need greening of shipping anyways, so let's focus on the emissions from the start.

█: on modal shift, the definitions are trying to be consistent with the others.
in absence of the sources....?
What modal shift does is confirm that this provides an alternative service to road or rail
Cases that I think that are ineligible –
There is no contention that we can provide quantification, this is a service that will otherwise be run...?
Electrification of the vessel fleet – need to be careful because technology is not mainstream,

█: Modal shift – you cannot put numbers that things are going to shift.
Rail to coastal shipping,
What if a ferry competes with a bridge.

█ : Not too concerned about modal shift... taxonomy will be useful for refinance and new investments, investors buy and sell....

If all inland shipping meets the taxonomy, that will promote the value of the asset class. And create more investment (strength of creating taxonomy)

on the transport side, shipping and rolling stock, environmental standards are being taken up for new fleet, on a design basis. Bring in assumptions about operating parameters, what's going to happen to fleet, over lifetime.

There are declarations, standards.

█ : Like the approach, but will be difficult to define the thresholds.

How will biofuels be covered?

█
Biofuels is recognised as an important dimension of discussion. Don't think we can get any further on that strand of discussion now, but we will come back with more.

█
Still making decisions, well to wheel, tank to wheel. If we are considering advanced fuels separately, we need to make sure we aren't doing well to wheel, you're going to have a double counting problem... you can't support advanced fuel separately and then count the use of advanced fuels in emissions.

█ :
Is this double labelling or double counting.

█ : there will be confusion on the taxonomy usage.

█ : This is a usage discussion, and it might pop up with euro green bond label.

DG CLIMA █ need to go further on how we can use the different indicators like the EEDI, it tells you what is the technical efficiency of the ship, based on the engines, the hull design. But it doesn't tell anything about the operation efficiency of the ship.

The question is then the threshold that you have to use. There are different requirements per ship category and per size.

For a different specific ship/size, then the objective is to be in the 10% best performing ship.

Then the question arises, how do we measure the operations of the ship, no clarity on that. Still a couple indicators that are being used, being used by different market actors.

IMO entered a strategy last year, cut 40% carbon intensity of world fleet.

Don't have clear criteria of how to calculate it, we still have a target.

Carbon intensity/transport work.

That will make it more tricky, how to take this on board and calculate operation efficiency.

Initial strategy of IMO regarding GHG emissions is to cut by 50% compared to 2008.

Will need to improve energy efficiency of the ship, but also deploy use of alternative fuels.

A lot of innovation to be supported. This should also be the role of the taxonomy.
There is a question of how to basically, how to point the ship, in the most promising technology.

More qualitative than a quantitative discussion.

A zero emissions fleet is sustainable.

For long distances, deep sea shipping, this won't happen tomorrow.

There are solutions, based on hydrogen, biofuels.. But it will not happen tomorrow.

█: MRV – useful data.

Is there useful data that will come online within the EU system that can be used to inform the thresholds and criteria...

EU Shipping guy: implementing EU MRV regulation to basically monitor CO2 emissions from shipping. As of last year, all ships calling at an EU port have the obligation to monitor and report their emissions. The first reporting period is this year.

we'll have the database online in June, which will have the emissions of all ship calling at an EU port last year.

Time spent at sea, cargo carried, many parameters that can be used to derive the operational efficiency of the ship.

There are indicators such as emissions gco2/distance or transport work, to help guide operational efficiency of a ship.

in addition, requirement to have the ship report their EEDI. Or a similar indicator, if they were built before 2013 when they didn't have obligation to have an EEDI.

expect around 12,000 ships to be on the database.

█:

MRV system – what is the average intensity, what is the average operation intensity. Will need to look at EEDI versus EEOI. Applicability.

EEDI is a clear go, you can use it

EEOI is not necessarily comparable but could still be used. Data access is an issue.

Broad support for general approach. Recognition that this is complex.

Slide on infrastructure:

█: Will be hard to implement projects on ports.

█: When a ship comes to shore and connects to port power. Shore to ship power.

█: Yes, big issue at some ports.

question on number 2: dedicated port facility to support wind sector.

Could be a hydrogen tank

support 3rd point, land transport.

If the average of the fleet, using the infrastructure meets the threshold. Then the infrastructure should be fine, don't worry about the dedicated.

EIB looks at a port project, and count a portion of that project as climate eligible, but if it's a multimodal investment, then we look at the elements that are low-carbon, then we count that portion, a percentage of it as climate action.

This is a granular approach that we take on project account within NDBs. Not sure how we can incorporate that approach within the taxonomy.

Need to interpret the wording, this is a portion of the investment that can be counted and the rest is not.

We need to rethink 'DEDICATED'. And the usability.

[REDACTED]: we should put dedicated, or we should change the transport? More than 50% is quite strict, fear that coal terminals or liquid petro terminals are not eligible, setting, another number could also be tricky.

WRAP UP

[REDACTED]: what is your KEY Issue?

[REDACTED]: make sure we look at issue of combining with ICT, behaviour change. Might also provide means to get investor money into those things. Labelling those things might help.

Swedish ([REDACTED]): need to include biofuels for road transport in a wise way. Referring to different regulations and directives.

[REDACTED]:

1) consolidating practical points -

one issue: the well to wheel issue, keep it for revision of the taxonomy.

Taking a further step, there will be a number of issues on the DNSH. The environmental dimensions.

[REDACTED]: representing the suppliers: someone has to fill in the figures that will be used in this taxonomy.

Wish that: we try to use figures that are easily accessible, otherwise this will be a bureaucratic nightmare for transport companies to come up with the figures. Keep to existing legislation, existing figures.

[REDACTED]: the issue is the thresholds for me, there needs to be evidence behind them and we aren't just coming up with figures. Because there is guidance on how to do that.

[REDACTED]: Well to wheel. Also mentioned a few times that we have to take into account 30-40-50 years these ships and trains will live. So we need to take that time dimension into account.

All the approaches now accommodate the transition period. Also important that we consider the biofuels, for shipping we should discuss all alternative fuels. We need to think about climate impacts.

: Insist on infrastructure – for some thresholds the difficulty of applying them, the 50% of infrastructure dedicated to fuel transport or infrastructure/low carbon infrastructure...

Sometimes it will be more complicated in reality, when infrastructure can have most different type of vehicles using it.

: Well to wheel, agree that it sounds good, but in practice, how is a car manufacturer going to prove what fuel is used in a vehicle, this can leave space for greenwashing. No one company can benefit from well to wheel, how can an oil company benefit from making well to wheel improvement.

: Tailpipe approach – when you look at these metrics, it's not anything in isolation, you need to look at how it contributes to overall suite of policies, there are zero emission vehicles eingefed according to tailpipe approach. Doesn't mean we stop caring, it's under the assumption that other policices suchas ETS, will contribute to overall final result.

: Yes, in our mandate we are factoring other bits of EU legislation.

: You know our position. We have some concern of putting thresholds that are not inline with the policies, so we can support anything that is ambitious. We are quite concerned about the threshold that have been proposed... will return with comments.

: Understand why everyone wants to align with existing legislation. BUT We're not talking about obligatory investment measures, we're talking about green labelling, so I would encourage going beyond what is already there. We aren't trying to invest in compliance, it's already happening, if we just repeat what is already there, then it would be a redundancy.

we are going beyond currentlegislation, by using..other legislation. The taxonomy, is about trying to define what are activities that contribute substantially towards a certain environmental objective, without harming other environmental objectives. There is scope to go beyond objectives, but...

: be more ambitious, label for green investments. Some companies can't align is fine, others can. We're on the right track.

: There is no perfect solution. It's simple, consistent. Deals with transport fleet, and infrastructure as a system.

We can add additional criteria requirements, but they will in many cases lead to reporting requirements, but in the end be the same result.

