

# European Valuer

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**TEGOVA's first in-person Conference and General Assembly in two years**

**New Board elected\***

- ▶ **Krzysztof Grzesik re-elected Chairman**
- ▶ **Jean-François Drouets appointed Vice-Chairman**
- ▶ **Cédric Perrière takes over from Michael Reinberg as Chairman of the European Valuation Standards Board**



*\*From left to right : Alexander Weber REV (IVD, Germany), Jean-François Drouets REV FRICS (AFREXIM, France), Silvia Cappelli (ASSOVIB, Italy), Konstantinos P. Pallis REV (AVAG, Greece), Krzysztof Grzesik REV FRICS (PFVA, Poland), Alberto Cabrera Guardiola REV (AEVIU, Spain), Paulo Barros Trindade REV (ASAVAL, Portugal) and Michael P. Reinberg PhD REV FRICS CRE (ARE, Austria)*

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- ▶ **Valuation practice had better follow**

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# Elections/Nomination

## THE NEW TEGOVA BOARD OF DIRECTORS

- ▶ Krzysztof Grzesik REV FRICS – Chairman\* (PFVA, Poland)
- ▶ Jean-François Drouets REV FRICS – Vice Chairman\*\* (AFREXIM, France)
- ▶ Paulo Barros Trindade REV (ASAVAL, Portugal)
- ▶ Alberto Cabrera Guardiola REV (AEVIU, Spain)
- ▶ Silvia Cappelli (ASSOVIB, Italy)
- ▶ Konstantinos P. Pallis REV (AVAG, Greece)
- ▶ Michael P. Reinberg PhD REV FRICS CRE (ARE, Austria)
- ▶ Alexander Weber REV (IVD, Germany)



Luke Brucato – Secretary, and Daniel Manate – Scrutineer, of the TEGOVA General Assembly and elections of the 23<sup>rd</sup> of October 2021

## NEW CHAIRMAN OF THE EUROPEAN VALUATION STANDARDS BOARD

- ▶ Cédric Perrière REV (CNEI, France)
- ▶ Previously nominated by the Board of Directors, Cédric Perrière took over from Michael Reinberg on 23 October.

\* There was a separate election to the Chairmanship immediately following the election of the Board.

\*\* Jean-François Drouets was nominated by the new Board at its first meeting on the same day.

# TEGOVA European Valuation Conference

*Extract from TEGOVA  
Chairman Krzysztof Grzesik's  
opening address at the  
TEGOVA Conference  
in Brussels on 22 October 2021*

Today marks nothing less than TEGOVA's return to physical life – the first General Meeting since Sofia two long years ago. The first in-person meeting of any kind since the Board last met in January of 2020.

True, I am proud of all that we did in that difficult interim. In fact, despite such difficult circumstances, never have we done so much [...]

[...] Indeed, like a lot of society, we discovered that the forced acceleration of video clearly has its up-sides.

Video is fine, but there are limits, especially for TEGOVA. We need in-person because it's in our very nature.

We are nothing if not a community, a family.

It's in our genes. We are a society of individuals.

TEGOVA embraces all valuation, including valuers from large, international firms, themselves sometimes offshoots of bigger entities.

But TEGOVA is essentially, intrinsically, a family of qualified valuers, whomever they may work for.

Our purpose, our raison d'être, is of course to provide Europe with reliable standards and recognisable, recognised qualifications, but everything we do is informed by the concern to support our 70 000 practitioners, to adapt our practice and qualifications to ensure the relevance and perennity of the profession in an environment that is fast-moving and dangerous, but also full of opportunity.

To achieve that, you need a TEGOVA where everybody feels at home and that, in turn, demands an organisation that is open to all, at every level and above all else the General Meeting where we all come together over several days in various fora, all of it crowned by the General Assembly which in TEGOVA, at least, is the summit of all power.

That's how you build trust, confidence in the future and individual vocations to participate in it.

But all of that, all of it, absolutely demands real human contact.

That's why, despite all the great things we've done during this dark interim, it is with pride, expectation but also great relief that I declare this Conference open and welcome the return to the light and to life.





## *The TEGOVA General Assembly held in Brussels on 23 October 2021*



## EDITORIAL (PART 1)

# Energy Performance of Buildings Directive — The transformation of real estate has begun

The revision of the European Commission's Proposal for a revised EU Energy Performance of Buildings Directive (EPBD) is expected to be released on 14 December, but a draft was leaked last week and superspread over Eastern Brussels. There are important changes everywhere, but the game-changer for real estate markets comes from a single sub-article on minimum energy performance standards for existing buildings.

Over twenty years, succeeding iterations of the EPBD laid down that owners must energy efficiency renovate when they undertake a major renovation, but they retain complete freedom of choice concerning when they renovate. Nothing stops the owner from sticking to the habitual 15, 20 or 25-year renovation cycle. Now, under the leaked draft Directive:

2. Member States shall ensure that buildings and building units which are sold or rented out to a new tenant, with the exception of building units in multi-apartment buildings,
  - (a) achieve at least energy performance class [E], for a transaction taking place after [1 January 2027];
  - (b) achieve at least energy performance class [D], for a transaction taking place after [1 January 2030];
  - (c) achieve at least energy performance class [C], for a transaction taking place after [1 January 2033];

By derogation from subparagraph 1 [means (a), (b) & (c)] a building or building unit that does not comply with the threshold set in subparagraph 1 may be sold under the condition that the buyer brings the building into conformity with the threshold applicable at the moment of sale, within [three] years from the date of sale.

3. Member States shall ensure that multi-apartment buildings
  - (a) achieve at least energy performance class [E] after [1 January 2030];
  - (b) achieve at least energy performance class [D] after [1 January 2035];
  - (c) achieve at least energy performance class [C] after [1 January 2040];

Combined with:

- 1a. By December 2025 at the latest, the energy performance certificate shall comply with the template in Annex [X]. It shall specify the energy performance class of the building, on a closed scale using letters from A to G. The letter A shall correspond to zero-emission buildings as defined in Article 2(1a) and the letter G shall correspond to the [15/20]% worst-performing buildings in the national building stock at the time of the introduction of the scale.

The letters and dates in brackets are still under discussion in the Commission, and may also be amended by the Council of Ministers and the European Parliament, but the writing is on the wall. Nor are these deadlines very surprising when you consider that all buildings need to be 'A class', i.e., zero-emission, by 2050, just like everything else in the economy.

It is truly remarkable that TEGOVA had the foresight to prepare for all this in EVS 2020, long before the Commission even began a first draft of the revision of the Directive. It suffices to compare the above draft EPBD text with EVS 6 Valuation and Energy Efficiency:

### EVS 6 Valuation and Energy Efficiency

A legal obligation to renovate a building to a higher level of energy efficiency by a fixed date or at a certain inflection point (e.g. rental, sale) creates an unavoidable major cost that impacts Market Value, as the owner at that date or inflection point will have to pay for renovation works.

Valuers must check for these legal deadlines and inflection points and when they appear, must estimate the cost of a renovation deep enough to meet the required new level of energy efficiency or future requirements that are sufficiently close to coming into force and consider the extent to which these costs affect the Market Value at the date of valuation.

## EDITORIAL (PART 2)

# Does revision of the Capital Requirements Regulation signal retreat from Market Value?

The European Commission's proposed amendment of the Capital Requirements Regulation would seem to increase the divide between valuations to Market Value and the valuations that banks must undertake in order for the collateral to be an eligible credit risk mitigant.

### Regulation (EU) 575 / 2013

#### ARTICLE 229

Valuation principles for other eligible collateral under the IRB Approach

For immovable property collateral, the collateral shall be valued by an independent valuer at or at less than the market value. An institution shall require the independent valuer to document the market value in a transparent and clear manner.

In those Member States that have laid down rigorous criteria for the assessment of the mortgage lending value in statutory or regulatory provisions the property may instead be valued by an independent valuer at or at less than the mortgage lending value. Institutions shall require the independent valuer not to take into account speculative elements in the assessment of the mortgage lending value and to document that value in a transparent and clear manner.

The value of the collateral shall be the market value or mortgage lending value reduced as appropriate to reflect the results of the monitoring required under Article 208(3) and to take account of any prior claims on the property.

### Proposal for a Regulation amending Regulation (EU) 575 / 2013

#### ARTICLE 229

Valuation principles for eligible collateral other than financial collateral

1. The valuation of immovable property shall meet all of the following requirements:

- (a) the value shall be appraised independently from an institution's mortgage acquisition, loan processing and loan decision process by an independent valuer who possesses the necessary qualifications, ability and experience to execute a valuation;

- (b) the value is appraised using prudently conservative valuation criteria which meet all of the following requirements:
  - (i) the value excludes expectations on price increases;
  - (ii) the value is adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan;

- (c) the value is not higher than a market value for the immovable property where such market value can be determined.

The value of the collateral shall reflect the results of the monitoring required under Article 208(3) and take account of any prior claims on the immovable property.;

**“All across the Union [...] banks' real estate collateral will now often be estimated at Market Value”**

Under the existing Regulation, banks can value at Market Value, period. No conditions:

1. For immovable property collateral, the collateral shall be valued by an independent valuer at or at less than the market value.

The conditions are all reserved for Mortgage Lending Value, which is clearly distinguished in a separate sub-paragraph. MLV and its special requirements — like not taking speculative elements into account — apply only to banks in member states that have regulated MLV.

In the Proposal for a Regulation, MLV isn't even mentioned in Art. 229(1), but some fundamental characteristics of MLV now permeate the whole article, creating one single unified, harmonised valuation process.

Under the Proposal, the value must be appraised using “prudently conservative valuation criteria”, defined as criteria that meet two requirements:

- (i) the value excludes expectations on price increases;
- (ii) the value is adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the loan;

(ii) is definitely not Market Value, but corresponds to the existing Regulation's requirement that MLV “not take into account speculative elements” (Art. 229(1), 2<sup>nd</sup> subpar.) and “take into account long-term sustainable aspects of the property” (Art. 4(74) [the 'definitions article'], the MLV definition being unchanged in the Proposal).

As we see in (c), the value can actually be Market Value, given the requirement that it “is not higher than a Market Value”, but it can only be a Market Value if that Market Value can survive conditions (i) & (ii). For instance, given (ii), there will be a divergence from Market Value if the valuation is taking place in an upward-trending market.

These are prudential requirements for banks so as to ensure the solidity of financial institutions and markets. It's not an attempt to change the nature of Market Value, which goes on being defined in the Proposal just as it is now under the current Regulation's Art. 4(76) and in EVS.

All across the Union, in MLV-culture countries and non-MLV countries alike, banks' real estate collateral will now often be estimated at Market Value. But banks may also wish to know what the collateral can sell for. Will they need two valuations, one to Market Value and another to 'Prudently Conservative Value'?

This Commission Proposal is now subject to amendment by the Council of Ministers and the European Parliament.

Michael MacBrien, Editor

# REAL ESTATE VALUATION

#01

## The notion of value in European climate policy

*The European Commission is, like the European Union itself, a political hybrid. It is the civil service of the Union, but it is also a political entity in its own right, with the immense power of proposing EU legislation to the Council of Ministers and the European Parliament and participating in the 'interinstitutional' negotiation. That's why it is crucial that the Commission be governed by the Commissioners, persons who come from, and return to, national or European politics. The Cabinet is the Commissioner's management team, hand-picked from all over Europe.*

*Karlis Goldstein's responsibilities include the energy performance of buildings. He was the keynote speaker at the TEGOVA valuation conference "EU climate law will transform real estate and valuation" in Brussels on 22 October on the topic "Getting the European Green Deal done". In this article, he returns to the political challenges of the Green Deal and closes in on value and valuation.*



Karlis Goldstein

As we turn the page in our calendars to welcome 2022, we also turn the page from the past into the future. We have learned that the fossil-fuel powered engine of our economy is running out of steam. To speed up recovery and create jobs that help improve our trade balance, resources are directed at sustainable services and products throughout the European Union. The future looks decarbonised. Although this looks like a paradigm shift, it is not.

In fact, this change is due to a naturally occurring transition from more polluting and wasteful processes to cleaner and more elaborate ones. The incumbent system brought us our quality of life and socio-economic structure, but it has also come to a point where we have realised how it has narrowed our vision in terms of solutions and, indeed, value.

The notion of value can be considered from a monetary, societal, functional or psychological perspective. Its measure depends on the context and upon the standards applied. The European Green Deal is one of these yardsticks and it states that the green transition brings opportunities but also challenges for everyone, irrespective of their income, skills or profession, and that precisely for this reason it must be just and socially fair. Our generation is the first to be aware of the global extent of current ecological change and it is also the last one that can do something about it. This is a profound ethical reflection that impresses a seal on our own values to reflect how we want to position ourselves in relation to the degrading economic viability of fossil fuels.



Assuming office in 2019, the current political leadership of the European Commission has chosen its side. The pandemic has offered a moment to step back and confirmed the need to build back better. We proposed the European Climate Law, voted by all Member States unanimously this spring, with the objective of decarbonising the European economy by at least 55% by 2030. This was quickly followed by a comprehensive set of strategies and regulation including the all-important built environment. Society is yet to recover from the pandemic and from the recent hike in energy prices, which is why special attention must be granted to relative wealth within the EU. Justice is the cornerstone of the European Union and the guarantor of an orderly transition. The question one might ask is: has the European Commission delivered? In my opinion, yes, and the coming year will provide the definitive answer: throughout 2022 our proposals will be negotiated by Council and Parliament in view of concluding them by year end.

The high importance of sustainability is a result, of course, of climate urgency, but also of a gradual evolution of political will, economic decisions and societal change. You, the valuation profession, can be the instrument of its measurement and take your own decisions over the course of the next years to shine the light on the value of the policy we are making today.

For real estate, the mantra going forward must be "Know your building", and that's why the new Energy Performance of Buildings Directive will give great attention to readily available, transparent information, be it via the energy performance certificate or a building renovation log, instruments that should help valuers in your crucial endeavour of putting a price on the building energy transition.

Karlis Goldstein, Cabinet of Energy Commissioner Kadri Simson

## #02

# Cutting the carbon crap in real estate valuations

### Pricing the decarbonisation transition



Xavier Jonqen

## “Code Red for Humanity”

The ominous warning contained in the latest UN IPCC climate report that global warming is showing signs of spiralling out of control, should be lighting a fire under real estate investors and valuers to bring us to the realisation that we need to engage the full power of market forces in bringing about the decarbonisation of our industry as rapidly as possible. But is the energy transition to a net carbon neutral, or even an operationally negative carbon built environment occurring with the urgency and speed it needs to?

I would argue that we've barely started, because we're not pricing the costs of decarbonisation into investment transactions, we're mostly merely labelling their energy efficiency. Without a market mechanism for capturing the 'greenium,' or the true 'Value' incentive of investing in decarbonisation, BREEM, LEED, or any other certification could become only token markers alongside the road to the climate change cliff edge.

We in the real estate industry, including the valuation profession, lie at the epicentre of the climate problem and must therefore be able to play a large part in mitigating, and adapting to, its consequences. We should all know the numbers by now. The built environment contributes around 35% of global carbon emissions, of which around 75% comes from operations, mainly heating and cooling, and 25% from the construction process. My market, residential, including rental and owner occupier, is the largest contributor among property sectors. Unsurprisingly, as that's where the eight billion of us on the planet live.

## Institutional Investors are Changing the Rules of Engagement through Double Materiality

The world is going to have to move rapidly towards pricing into investments 'Value' that wasn't previously considered in financial terms, if we are to stand any chance of seriously tackling climate change, or, for that matter, the other great challenge of our age, social inequality. The price point, as a signal of value, is absolutely central to the notion of capitalism. Fortunately, there are signs that this could be starting to occur at the regulatory level. The European Commission has asked the EU pensions supervisor EIOPA to assess the potential need to introduce the notion of 'double materiality' in Europe's pension financing framework. Double materiality would require pension funds to equally weigh climate impact and societal factors alongside financial risks and returns in their investment decisions. The double materiality concept is already present as a qualifier for the Sustainable Finance Disclosure Regulation's Article 9 'dark green' investment fund categorisation.

A paradigm shift in the weighing of pension liabilities, risks and returns from a mainly financial focus under double materiality would, for example, also be expected to fundamentally change the basis on which capital is allocated in the Dutch institutional investment sector – the largest private pension market in the world, and also a major group of investors in real estate.

We've come from a world where Milton Friedman stated that the only raison d'être for an organisation is to create financial value for its shareholders, to one where pension funds and other institutional investors refer to the UN Sustainable Development Goals as part of their investment strategies, which means they are changing the 'Rules of Engagement.' If a large part of society believes the prevailing economic system does not produce fair and positive results, then that disconnect forces the system to change. Ipso facto therefore, are the Rules of Engagement in real estate valuations, as currently defined, still fit for purpose? A profession that works with backward-looking 'comparables' is just not configured to handle the forward-looking and currently 'un-benchmarked' notion of decarbonisation in real estate, so we need a new approach in the valuation framework to bring this onto the profit and loss balance sheet.

SOCIAL IMPACT				
IMPACT CATEGORIES	Housing	Health	Education	
IMPACT THEME	Social/Affordable Housing	Health and Wellbeing Facilities	Educational Facilities	
PRIMARY IMPACT UN SDG	10 (Reduced Inequalities)	3 (Good Health and Well-being)	4 (Quality Education)	11 (Sustainable Cities and Communities)
SECONDARY IMPACT UN SDG	1 (No Poverty), 2 (Zero Hunger), 5 (Gender Equality), 8 (Decent Work and Economic Growth)	3 (Good Health and Well-being), 10 (Reduced Inequalities)	4 (Quality Education), 10 (Reduced Inequalities)	11 (Sustainable Cities and Communities), 13 (Climate Action)

ENVIRONMENTAL IMPACT				
IMPACT CATEGORIES	Green Building	Regeneration		
IMPACT THEME	Energy Efficiency and Clean Energy	Energy and Resource Efficiency		
PRIMARY IMPACT UN SDG	7 (Affordable and Clean Energy)	13 (Climate Action)	7 (Affordable and Clean Energy)	13 (Climate Action)
SECONDARY IMPACT UN SDG	11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production)	6 (Clean Water and Sanitation), 11 (Sustainable Cities and Communities)	11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production)	11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production)

► UN Sustainable Development Goals – Impact Investments  
Key concept: Sustainability; Additional: Impact reporting  
► CATELLA Residential Investment Management

## Double Materiality at the Asset Level; Moving the Needle from value to 'Value'

Catella has started a €2.0 billion investment programme to roll out 100 residential towers across European markets based on French engineering design company Elithis' revolutionary combined construction and socio-economic building concept successfully trialled and proven over the last three years in Strasbourg: The world's first 'energy-positive,' residential tower at scale that produces more energy than the building and the tenants consume, including their private usage of energy. The complete, or virtual, eradication of domestic energy bills, results in total 'effective' rental costs being 5-10% below the average of a comparable asset in the neighbourhood in which the Elithis towers are located. This significantly boosts household incomes and means they are always affordable within the community context of where they're built.

Creating a self-sustaining residential asset that shields the consumer from unprotected exposure to volatile energy market prices, particularly relevant in Europe's current gas crisis, gives Catella more leeway to experiment with integrating the societal 'S' element deeper into our 'dark green' ESG investment model. Energy cost savings are effectively translated into a tool to maximise social impact.

For example, we can prioritise boosting the purchasing power of a single mother with two kids and a job, because we know that housing affordability is a big challenge for precisely this type of household, with women on average earning 10% less than men in European economies. Similarly, we can tackle often implicit housing market discrimination against minority groups through proactively influencing the composition of our tenant mix to ensure it reflects the diversity of the broader city community in which the Elithis towers sit. Here too, energy cost savings can be directed towards benefitting those who may otherwise have fallen below the '40% of disposable income' hurdle that constitutes the base threshold for 'affordable rents' within the EU.



► Double Materiality: towards 'on-balance sheet or off-balance sheet'  
► Bellier Communication

We thus avoid the 'moral hazard' that is usually contained in 'broad brush' public housing policies with a one size fits all strategy that produces the unintended consequence of also benefitting those who are not in need. The social housing corporation trap where many tenants that are not really entitled to live in these homes, because their incomes are too high, are effectively being subsidised at the expense of other possible tenants whose social need is greater, but are being shut out. Catella also avoids the 'moral inflation' of some investment managers who claim they are addressing housing affordability simply by the fact of adding new supply.

But valuers can't price these 'intangibles' or double materiality. The profession acts as though decarbonisation has zero cost and the Elithis towers are treated in the same way as carbon heavy assets from the fossil fuels and energy labelling era. Catella's investors get no 'greenium goodwill' in the valuation of Elithis assets, or on our fund balance sheets, because the investment in the decarbonisation process is invisible according to valuers and this is creating a substantial impediment to innovation for the energy transition in the built environment. The price point mechanism, central to capitalism, is not yet working to be able to move us from financial returns to real stakeholder returns.

**“If property valuers do not move towards including forward-looking decarbonisation costs in their assessments, [...] they will further disconnect from the direction in which society and lawmakers are moving [...]”**

For example, I might want to buy a building for one of the Catella Residential funds for say €20 million and I calculate the decarbonisation investment costs for this asset at €2.0 million. In the final round of bids then go to my acquisitions team and say can you please lower your offer to €18 million, because that will then include the actual decarbonisation costs. They would roll their eyes and think I'd taken leave of my senses. We all know that that would kill the deal. But everyone is facing the same problem and no single company, however big, can change this system alone. It is a type of 'common good' problem that has to be tackled industry-wide, through organisations such as ULL, TEGOVA, INREV and others, because global warming is the biggest challenge of this century, as far as we can know, and we'll only be able to find game-changing solutions through collaboration.

Climate change is best handled in a two-pronged way at the international and local levels, but the nation state still retains the reins of power. We are fortunate in Europe to have the European Commission, which has been empowered to propose new supranational legislation. The upcoming 'Fit for 55' legislative proposal means the EC will be bringing the real estate and construction industry closer to a climate action level comparable with the automotive industry, and rightly so. The car industry will decarbonise by 2035, moreover fossil fuel cars will be banned from many cities by their local authorities before 2030. It is logical to expect the same for real estate.

If property valuers do not move towards including forward-looking decarbonisation costs in their assessments, because this isn't in the existing valuation standards, they will further disconnect from the direction in which society and lawmakers are moving and may find new rules thrust upon them without significantly influencing their form.



## Confusing Energy Ratings with Decarbonisation Costs and Pricing the Route to Paris

Great progress has already been made in EVS 2020 which references the principle: "include forward-looking energy transition costs into your valuation". But if the principle is there, how do you execute? Catella's approach to pricing our investment in decarbonisation is imperfect, but practical and transparent. We list the component units to be assessed within the asset, whether that's solar panels, windows, the elevators or heating system, etc. and arrive at an approximate number for the operational cost of doing this, which we've found averages around 5%-15% of the value of the building based on the index-based tool we've developed. Of course, maybe 20%-50% of these outlays could also be folded into the long-term maintenance programme for the building, there is some natural replacement, and there are also energy cost savings, but it is still a significant gap.

I've asked developers what they think the decarbonisation costs are of new buildings we are buying from them and they usually say 'zero', because of the high energy efficiency ratings they've been proud to achieve. But that's absolutely the wrong answer. There's some correlation between the two, but there is only partial causality.

We need to start thinking about technology and including it in our financial projections, because some decarbonisation technologies applied in buildings are expensive upfront and like most innovations get cheaper over time. We have to be able to plot the timeline on which we can decarbonise the built environment to arrive at the Paris climate targets in eight, 15, or 30 years, depending on the capabilities of the companies in our industry. To do that we must be able to utilise the discount factor from a place in time by ending up with a net present value for decarbonisation costs.

## Real Estate's 'Minsky Moment' of Moral Materiality

A 'Minsky Moment' refers to the onset of a market collapse after an unsustainable bull market characterised by a 'tipping point' where the market's perception of value rapidly changes. The abolition of slavery could be seen as a moral tipping point, where society's mainstream view changed and it became abhorrent to use human beings as goods to be traded. Ethical 'Values' replaced financial 'valuations' of people and eventually slaves become workers with rights and wages and these costs were moved onto the balance sheet.

I believe we may be approaching a Minsky Moment of double materiality in real estate valuations, where it becomes morally unacceptable to invest in buildings whose owners are either not decarbonising their standing assets, or constructing new ones that are not operationally carbon neutral, or carbon negative. Because by doing so we would be ignoring our individual ethical responsibility to do the uttermost we can to limit the extremes of global warming and the catastrophe it will unleash on this generation and those of the future.

We can already see the possible precursors of a Minsky Moment repricing, like the foreshocks before earthquakes, where certain assets are taking longer and longer to sell, and some are being taken out of the market.

## Where do We Go from Here?

Every single one of us in the industry should take a little personal responsibility. If we do, then together we'll have the power to really make an impact. Let's start with valuations. How difficult would it be to propose to each client an 'Environmental Valuation' alongside the Market Value valuation – adding say 10% to the fee? Secondly, material data are currently scattered in different unconnected formats in a plethora of organisations. Vital data for our 'common good' contained in organisational or personal 'silos' should be pooled and become collective intelligence. We are blocking the road to achieving the Paris Climate Accords goals when these data are not generally accessible and sometimes hidden away, rather than being enhanced to produce knowledge, insight and value.

**“How difficult would it be to propose to each client an 'Environmental Valuation' alongside the Market Value valuation – adding say 10% to the fee?”**

Would it not be an idea to develop a centralised datapool of valuations, enhanced by already existing image and language algorithms? Sharing data will speed up the solution to the decarbonisation pricing challenge we have in front of us and in a much more precise and cost effective way than the industry's current approach.

Real estate industry stakeholders, from tenants, valuers and developers, to end-investors, need to engage with each other to find solutions to the dilemmas of decarbonisation and then work with regulators to turn these into rules that can be implemented in the most efficient way. If we don't, then regulators could push through legislation which lacks the insights and illumination provided by the vast experience and profound knowledge of our industry's stakeholders. This is a common good problem, we should mutually disarm from funding our particular interests by lobbying one-by-one in Brussels. A 'peace dividend' in lobby funding could then be channelled to despatch our best people to Brussels to work out and embrace new innovations, crack the most difficult challenges, then turn to the Commission with a single voice and accelerate the real estate industry's journey to a net carbon neutral built environment.

**“Would it not be an idea to develop a centralised datapool of valuations, enhanced by already existing image and language algorithms?”**

## TEGOVA: CAN YOU CHANGE THE RULES OF ENGAGEMENT AS WELL?

**THE NORMAL ROUTE**  
Wait for market to slow down and reprice. You will end up valuing without comparables in Minsky Moments.

**NOT THE NORMAL ROUTE**  
Work with the spirit of regulation and already now, change the rules of engagement.

► CATELLA Residential Investment Management

## CAN WE WORK ON 2 PROPOSALS?

Propose to every investor an Environmental Valuation, on top of fair value (decarbonised def valuation).

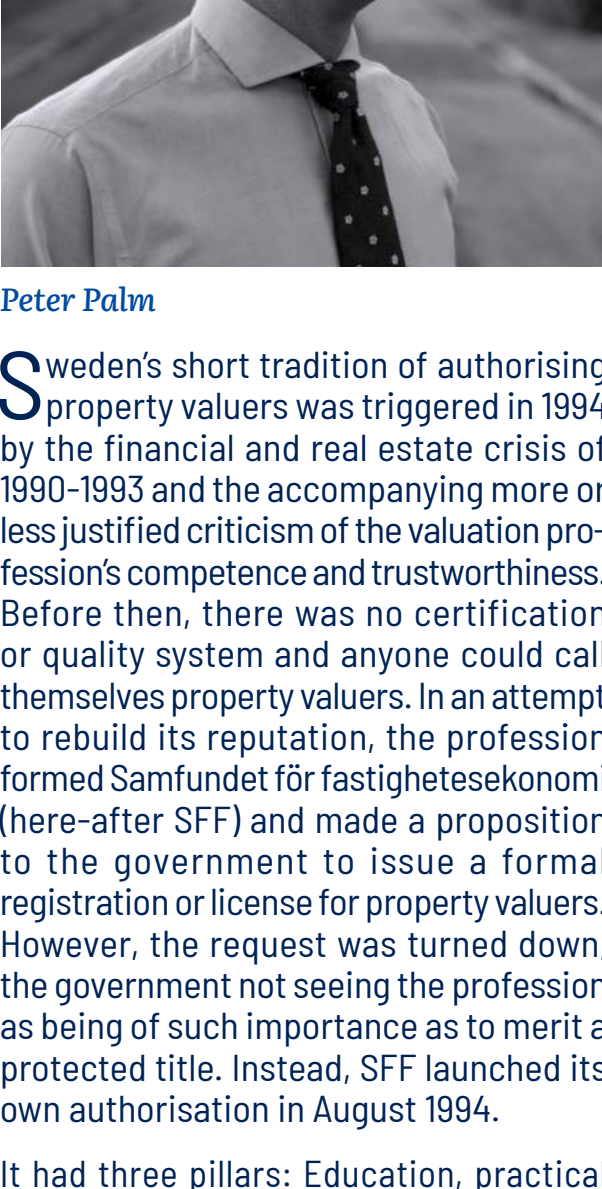
Work with industry bodies in Brussels and elsewhere (ULL, INREV) to create a dataset of environmental attributes and an algorithm that prices environmental market evidence across the continent.

► CATELLA Residential Investment Management

Xavier Jonqen is Managing Director, Catella Residential

## Authorisation of property valuers in Sweden

### Changing requirements



Peter Palm

Sweden's short tradition of authorising property valuers was triggered in 1994 by the financial and real estate crisis of 1990-1993 and the accompanying more or less justified criticism of the valuation profession's competence and trustworthiness. Before then, there was no certification or quality system and anyone could call themselves property valuers. In an attempt to rebuild its reputation, the profession formed Samfundet för fastighetsekonomi (here-after SFF) and made a proposition to the government to issue a formal registration or license for property valuers. However, the request was turned down, the government not seeing the profession as being of such importance as to merit a protected title. Instead, SFF launched its own authorisation in August 1994.

It had three pillars: Education, practical experience, and independence, and three sub-pillars: continuous valuation activity, continuous vocational training, and adherence to the code of ethics and conduct. There were three authorisation categories: General, Agricultural, and Single-family homes.

The basic principles of valuer authorisation are still the same today, with small modifications and clarifications. In 1994, the educational requirement for authorisation was 3-3½ years' fulltime university studies, with specified courses. At that time, almost all education addressing the real estate sector was engineering programmes, but that evolved over the years, especially in the new universities.

### Two changes during 2000 - 2010

Social and technological developments of the early 2000s brought two changes.

As automated valuation models (AVMs) were introduced in Sweden for private homes, many valuers specialised in this area lost a large portion of their commissions and were paid less for those they still had. In an attempt to facilitate authorisation for home valuers, the educational requirements were lowered to 2½ years of university studies for them. This attempt by the previous board to attract valuers failed. Lowering the educational requirements did not make home valuation more attractive as the commissions did not increase and the fees remained low.

The other novelty was authorisation of internal property valuers, which came about for two reasons: First, the real estate companies had started to face tougher criteria for their financial reporting and this was a way to enable a competence certification for their in-house valuers. Second, the ever-increasing pressure from the banks for authorisation of their own valuers. For the authorisation of these internal valuers all the criteria regarding education, experience, vocational training are the same. The exception is the independence criterion. As authorised internal company or bank valuers only make valuation reports for their employers, they will never be able to act impartially.

### The previous requirements

#### General authorisation

210 ECTS (3½ years) where 120 ECTS should have the following distribution:

7,5-15 ECTS Mathematics, Statistics and Computer science

7,5 ECTS Bookkeeping

15-22,5 ECTS Economics and Business administration

15-22,5 ECTS Real estate management and Taxation

15-22,5 ECTS Real estate economics including valuation

15-30 ECTS Law including Real estate law

7,5-22,5 ECTS Construction

#### Agricultural authorisation

180 ECTS (3 years) where 90 ECTS should have the following distribution:

15 ECTS Mathematics, Statistics and Computer science

15 ECTS Economics and Business administration

20 ECTS Real estate management, Agricultural businesses and Taxation

10-20 ECTS Real estate economics including valuation

10-20 ECTS Law including Real estate law

7,5-22,5 ECTS Construction

3 ECTS Agricultural politics

#### Single family homes authorisation

150 ECTS (2½ years) where 90 ECTS should have the following distribution:

7,5 ECTS Mathematics, Statistics and Computer science

15 ECTS Business administration with accounting

7,5 ECTS Economics

7,5 ECTS Taxation

15 ECTS Real estate economics

7,5 ECTS Valuation

15 ECTS Law including Real estate law

15 ECTS Construction

For the three different authorisations, there is a four-page Appendix specifying the knowledge to be included in each of the subjects above. This appendix was problematic as the specifications were very detailed. Most universities could not agree on the specific categorisation of 'economics', 'real estate economics', and 'business administration', adding to uncertainty among applicants. More problematic was that some specifications in the appendix were either redundant or misleading. For example, specification of laws that had been altered and were no longer current, or specification of computer systems no longer in use or specific courses in the use of Word or Excel that most university education doesn't include.

### Arguments for modification

I would argue that there is no university education in real estate today that fulfils all the requirements in the appendix. And there were three even more important reasons for changing the requirements.

First, from 2007 the Swedish university system was modified in line with the Bologna Process. Bologna is a process of creating a unified European system for higher education facilitating academic movement and increasing Europe's educational attractiveness. One particular outcome is introduction of the ECTS system in all countries. Another is that higher education is divided into three degree levels:

- ▶ First cycle (Bachelor degree)
- ▶ Second cycle (Master degree)
- ▶ Third cycle (Doctoral)

Within the Bologna three-cycle degree system, first-cycle degrees (three years) give access to second-cycle programmes and Second cycle degrees give access to doctoral studies (Third-cycle). This led to the reform and transformation of the 4½ year Swedish university education into a first- and second-cycle education together amounting to five years.

We saw that harmonising the educational requirements for authorised property valuers with this reformed educational system by imposing a degree requirement would both give a quality signal and make the requirements more easily understandable.

Second, we wanted to make requirements in sync with current educational trends and also flexible enough to adapt to the varying educational content offered at different universities.

Third, we wanted to ensure and uphold the quality that justified the authorisation in the first place. **We wanted it to be easily understood that there are up-to-date high requirements to become an authorised property valuer**, not too high to be too great a barrier to entry, but high enough to exclude the opportunistic from entering the profession.



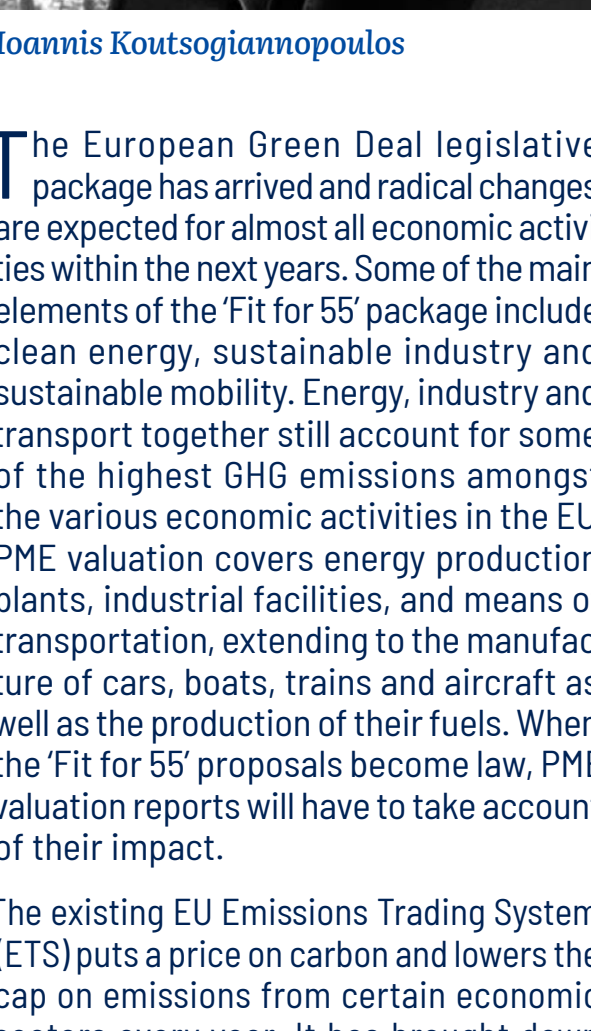
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# PLANT, MACHINERY & EQUIPMENT VALUATION

#04

## Equipping valuers for EU carbon reduction regulation



**Ioannis Koutsogiannopoulos**

The European Green Deal legislative package has arrived and radical changes are expected for almost all economic activities within the next years. Some of the main elements of the 'Fit for 55' package include clean energy, sustainable industry and sustainable mobility. Energy, industry and transport together still account for some of the highest GHG emissions amongst the various economic activities in the EU. PME valuation covers energy production plants, industrial facilities, and means of transportation, extending to the manufacture of cars, boats, trains and aircraft as well as the production of their fuels. When the 'Fit for 55' proposals become law, PME valuation reports will have to take account of their impact.

The existing EU Emissions Trading System (ETS) puts a price on carbon and lowers the cap on emissions from certain economic sectors every year. It has brought down emissions from power generation and energy-intensive industries by 48.2% in the past 16 years. The proposed ETS will lower the overall emission cap even further and increase its annual rate of reduction. As the noose gets tighter, there will be an ever-greater value premium for plant, machinery and equipment that can function fuel-efficiently – and discounts for those that can't – that the valuer will need to identify and compute.

The Proposal amending the Renewable Energy Directive includes in its article 22a:

*"Member States shall ensure that industrial products that are labelled or claimed to be produced with renewable energy and renewable fuels of non-biological origin shall indicate the percentage of renewable energy used or renewable fuels of non-biological origin used in the raw material acquisition and pre-processing, manufacturing and distribution stage, calculated on the basis of the methodologies laid down in Recommendation 2013/179/EU or, alternatively, ISO 14067:2018."/>*

This requirement will provide the valuer with a tool to evaluate the decarbonisation of several industrial processes and hence the extent of any value premium for PME.



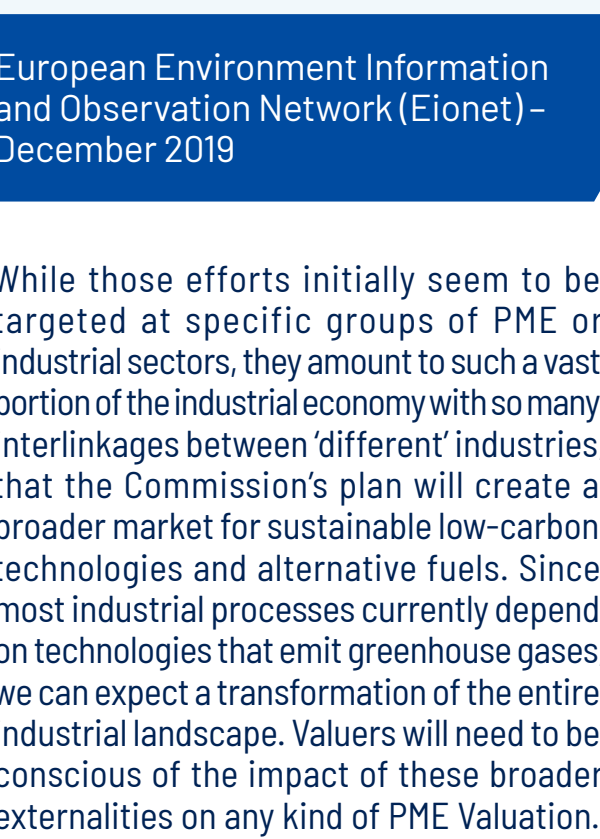
New regulation is strengthening CO<sub>2</sub> emissions standards for the whole automotive industry, accelerating the transition to zero-emission mobility by requiring average emissions of new passenger cars to come down by 55% from 2030 and 100% from 2035 compared to 2021 levels. As a result, all new cars registered as of 2035 will be zero-emission. Meanwhile the Euro 7 emission rules proposal is expected soon and will accelerate the shift to sustainable and smart mobility, preparing the ground for the zero-emission future. The valuation of any PME connected to the automotive industry (vehicles, automotive manufacturing plants, accessories manufacturing, etc.) will need to be completely reviewed and recalibrated in the light of these deadlines.

Concerning aircraft, the new sustainable air transport regulation will oblige fuel suppliers to blend increasing levels of sustainable aviation fuels (SAF) in jet fuel taken on-board at EU airports, including synthetic low carbon fuels, known as e-fuels. SAF volume share is to rise from 2% in 2025 to 63% in 2050. This will impact valuation reports both for aviation fuel manufacturing processes and for the manufacture of aircraft capable of assimilating such fuels. Regulation on the use of renewable and low-carbon fuels in maritime transport will stimulate the uptake of sustainable maritime fuels and zero-emission technologies by setting a maximum limit on the greenhouse gas content of energy used by ships calling at European ports. The greenhouse gas intensity limit of energy used on-board rises from -2% in 2025 to -75% in 2050. There are additional zero-emission requirements of energy used at berth.

### Share of transport greenhouse emissions\*



### Share of road transport greenhouse emissions\*



\*European Environment Information and Observation Network (Eionet) – December 2019

While those efforts initially seem to be targeted at specific groups of PME or industrial sectors, they amount to such a vast portion of the industrial economy with so many interlinkages between 'different' industries, that the Commission's plan will create a broader market for sustainable low-carbon technologies and alternative fuels. Since most industrial processes currently depend on technologies that emit greenhouse gases, we can expect a transformation of the entire industrial landscape. Valuers will need to be conscious of the impact of these broader externalities on any kind of PME Valuation.

The EVS-PME Valuation Standards will capture the way this transformation of the entire industrial sector is going to affect PME Valuations. Some examples of predictable effects in valuation methodologies:

- Market approach**
- ▶ The green transition will create new markets for clean technologies and products.
  - ▶ Established markets might shrink or disappear.
- Cost approach**
- ▶ New technologies will now be required for several production processes resulting in functional/technological obsolescence for current PME.
  - ▶ Costs for disposal may rise due to new requirements affecting the Residual Value of many PME.
- Income approach**
- ▶ Period of income will frequently be limited by regulation-mandated retirement of some technologies.
  - ▶ Improving energy efficiency is going to require frequent green investments with midterm payback periods, increasing the complexity of regular cashflows.
  - ▶ Supply of clean resources may be more expensive initially. While renewable electricity can replace fossil fuels in many applications, the more expensive hydrogen may play an important role in industrial activities such as steel production, where fossil fuels are used as an energy source and as a reactant.

At the end of the day, all PME are expected to be affected to a greater or lesser degree. At present, we can only assume and predict some of the effects of the new regulation. Valuers will need to be aware of its radical impact and EVS-PME will show the way.

### Examples of PME Groups with relevant negative impacts ensuing from the European Green Deal

LOW IMPACT	MEDIUM IMPACT	HIGH IMPACT
Electronic & IT equipment	Packaging	Oil refining plants
Medical equipment	Agricultural equipment	Cement plants
Automation/Robotics	HVAC	Plastics manufacturing
Reprographic machines	Pharmaceutical manufacturing	Transport equipment
Carpentry equipment	Steelworks (electric ovens)	Mining equipment

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