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Inaugural address

A better world starts with public procurement

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A better world starts with public procurement

Dear Rector Magnificus, honoured colleagues and students, dear purchasers and other representatives of our field, dear family and friends, valued other guests.

The importance of sustainable public procurement

A better world starts with public procurement. That is to say: a better world begins with the way in which contracting authorities[1] go about purchasing services, goods, buildings and infrastructure. With procurement that focuses not only on the traditional factors of price and quality, but which takes people and the environment into account as well. In other words: sustainable procurement[2].

I can hear you thinking: can that be true? Why should a better world start with sustainable public procurement? Doesn't a better world begin with ourselves[3]? Or with businesses that must adopt more sustainable practices[4]? And if not there, then with legislation, subsidies or taxes[5]?

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[1] Organisations such as ministries, municipalities, provinces and so on.

[2] Sustainable procurement can be defined in many ways. When, in this address, I refer to *sustainable procurement*, I mean "procurement that takes price, quality, people and the environment into account". The word "social" or "society" is often used in place of "people" in this context.

[3] Many consumers struggle with more sustainable buying behaviour, for instance due to the costs, or the influence of advertising, because we sometimes fall victim to the rebound effect [53], or because the matter is complicated, such as when there is a lack of information [54].

[4] As it stands, companies with sustainable designs and operations do not always flourish because they must compete with cheaper businesses that are less sustainable, while at the same time price is often an important factor (or sole criterion) in deciding who will be awarded a contract.

[5] Although sustainability-related legislation could help level the playing field for sustainable companies, it is usually not very progressive or is insufficiently enforced [59]. The solution put forth by Pigou [55] long ago – to use taxes to ensure the real price is paid – has not yet been fully adopted.

Naturally, each and every one of these parties and themes can contribute to a more sustainable world. Yet I still believe that *public procurement* has a vital leading role to play when it comes to increasing the sustainability of our society.

First of all, I think that *procurement* is important because if all purchasing is conducted sustainably, sustainable supply will increase and non-sustainable supply will dry up. As regards *public procurement* specifically, there are multiple reasons why it lends itself to a leading role:

- *Scale*
  Contracting authorities conduct procurement procedures often and in many markets. In 2022 in the Netherlands, this was probably done around 200,000 times, with a total expenditure of €100 billion[6,7,8]. Through their purchasing, Dutch contracting authorities account for 12% of the country's total CO_2 emissions and 13% of its mineral use [1][9]. By practising sustainable procurement, contracting authorities can affect large-scale behavioural change – even on the part of major companies (potential major polluters). This has not only a direct impact, but also an indirect impact as companies will increase

[6] I have calculated a low estimate of the total procurement volume in 2022 by extrapolating previously obtained figures for 2009, 2015, 2017, 2018 and 2019 in a linear fashion (see, among others, [50]). This estimate works out to around €95 billion. In calculating this, I have taken rising inflation into account, as well as additional procurement costs incurred in 2022 as a result of COVID-19. A high (or higher) estimate is around €105 billion and I have calculated this by assuming that about 30% of the total government spending in 2022 was procurement-related expenditures, as this was more or less the case in the years 2015, 2017, 2018 and 2019.

[7] The European Commission applies a different definition of public procurement (including the care purchased by care agencies and insurers) and arrives at a figure that is approximately twice as high [49].

[8] European contracting authorities conduct procurement procedures for a total of around €2,000 billion per year [52]. Worldwide, the amount is approximately $13,000 billion [56]. While there are other figures out there, they do not differ by much.

[9] Sources around the world report similar amounts [9].

the sustainability of their supply to non-government customers as well [2][10];

- *Setting a good example, responsibility and moral duty*
  Contracting authorities are supposed to set a good example [3, 4]. It is also often said that prosperous and highly-developed countries – who emit large quantities of greenhouse gases – have a moral duty to increase their sustainability[11]. In principle, contracting authorities do not require legislation in order to change their purchasing behaviour – but it would be helpful [5];
- *Risk capacity, professional capacity and knowledge*
  Contracting authorities can take greater risks and organise professional capacity and knowledge for sustainable procurement and commissioning. While this is especially true for larger contracting authorities, it also applies to smaller ones [6], potentially via joint procurement [7, 8];
- *Positive and risk-reducing business case*
  In the long term, contracting authorities stand to benefit from environmentally-friendly purchasing because it is much cheaper to prevent pollution than to clean up the damage afterwards. What's more, sustainable procurement entails low added costs, potentially as little as 1 to 6% [9, 10]. And on the other hand, the long-term risks of non-sustainable procurement are severe [10];
- *Contribution to various aims*
  Circular and climate-neutral procurement also reduces our dependence on fossil fuels and raw materials and increases the reliability of supply chains. After all, sustainable procurement

[10] Because the scale is distributed across many contracting authorities, it is necessary to use policy or missions to provide direction to sustainable innovation-driven procurement that calls for scaling up. Similar government missions have previously demonstrated that they can offer a wide range of benefits for our society, such as the many spin-offs of the Apollo project and the COVID vaccines [58].

[11] In the Netherlands, the amount per capita is more than twice the global average[51].

contributes to other important aims of the government, such as reducing the number of conflict situations [11], creating a safer environment and a healthier world [12].

There are also reasons why public-sector purchasing might be unsuitable (or less than ideal) for a leading role in increasing the sustainability of our society. I'm thinking, for example, of how complex it is to monitor sustainability. This can open the door to misuse by the Don Corleones [13] – or in more contemporary terms, the Don Savastanos – of the world, who might not honour the terms of their bids. In addition to monitoring problems, there are other challenges such as a shortage of time and knowledge, separate budgets and too little pressure or a lack of perceived necessity.
If, in light of these challenges, you think that sustainable public procurement should not be at the head of the pack, I hope you will nevertheless agree with me that it should at least be given a post position. While sustainable procurement needn't compete in every single “race”, it should be part of those purchasing processes that show strong potential for long-term success.

The key themes of the chair: do the right things and do them right

The chair uses two key themes for categorizing its research. The first key theme is aimed at doing the right things. The second key theme is concerned with doing those things right. In the context of public procurement, this means that we want to investigate how sustainable procurement can be accelerated (more often doing the right thing). And also how we can buy more efficiently (doing things right). In part, the key themes go hand in hand as well. For example, sustainable procurement must be done efficiently and actually lead to sustainability.

For both key themes, I have divided the research questions into four categories:

1. Monitoring developments
2. Understanding mechanisms
3. Measuring effects
4. Offering direction

I will return to these categories in the second part of this address.

The key themes are of practical significance as well. This is because they are based in part on interviews I conducted, after the chair was established, with the broad group of its sponsors: i.e., representatives of the Ministries of Defence, the Interior and Kingdom Relations/Directorate-General for Government Organization and Justice and Security; the Municipalities of Amsterdam and The Hague; the Dutch Tax and Customs Administration; the National Police; The Hague Purchasing Cooperative (HIS); the Employee Insurance Agency (UWV) and Stichting Rijk, in cooperation with Nevi. Every interview addressed aspects of both key themes.

Reading guide

I have divided the remainder of this address into three parts:

1. *A history of procurement based on price, quality, people and the environment*

   Let me begin with a rough account of the history of procurement based on price, quality, people and the environment. At the end of part 1, I assert that we have become increasingly aware of the importance of sustainable public procurement, yet it is still relatively

infrequently applied. If a better world begins with public procurement, there is still a lot of work to be done;

2. *A world of possibilities for achieving more sustainable procurement today*
   In part 2, I reflect on the here and now. I indicate what we can do today if we want to achieve more sustainable procurement and accelerate the transition to a sustainable society. In doing so, I touch on procurement policy, process and technique. At the end of part 2, I conclude that there are many possibilities for sustainable procurement and accelerating the transition;
3. *Looking ahead to the future and the contribution of the chair*
   I conclude in part 3 by looking ahead to the future. Will we be able to do more to make the world a better place through public procurement? And how might this chair contribute to that aim?

Wherever relevant, I indicate how we are trying (via the chair) to contribute to resolving the questions and challenges I have listed in this address. In doing so, I refer to various types of research (from student assignments to doctoral research) that we in the chair use to generate scientific knowledge.

Part 1: A history of procurement based on price, quality, people and the environment

In part 1 of this address, I shed light on the history of procurement carried out by Dutch contracting authorities based on price, quality, people and the environment. By doing so, I want to introduce you to the various perspectives and insights with regard to these topics that have existed in different periods of time.

To enable those who are not involved in public procurement to better understand this address, I will also provide some context regarding public procurement.

In the Netherlands, the word "purchasing" typically refers to all purchases which are externally invoiced [14]. If we were to add up all the invoices received by Dutch contracting authorities each year, we would arrive at the aforementioned sum of around €100 billion. A little more than one half of this sum is spent by local authorities such as municipalities and provinces. Central contracting authorities account for around one third and various public organisations, such as academic hospitals and social security funds, make up the remainder. The vast majority of procurement procedures involve small to very small contracts/purchases (around 96% of the total number and 66% of the money spent). The rest exceed specific threshold amounts[12] and must be put out to tender in a European tender procedure.

[12] For products and services for the central government, the threshold amount is €140,000. The threshold for local contracting authorities is €215,000, while for defence and special sector businesses, the threshold is €431,000. In connection with construction and infrastructure and for concessions, the threshold for all contracting authorities is the same: €5,382,000. For social and other specific services, the threshold is €750,000 for local contracting authorities and

When a contracting authority agrees to make a purchase from a supplier, we refer to this as "awarding a contract". To ensure the proper procedure is followed, contracting authorities are subject to laws: for example, the Dutch Public Procurement Act. This is an extensive document, based primarily on four principles: non-discrimination (making no distinction based on nationality), equal treatment (all suppliers who participate in a tender must be treated in the same objective manner), transparency (the manner of evaluation must be clear and decision-making must be substantiated) and proportionality (among other things, the requirements and scope of a call for bids must be in proportion to the nature and size of the contract).
The Public Procurement Act is regularly accused of restricting buyers to a large extent to purchase properly, but that is a myth. Even within the rules, there is a lot of room to buy effectively and efficiently. There is a bit more to it because of the rules, but we get a lot in return. Think of a level playing field for the whole of Europe for international suppliers, but especially fairer decisions. Elisabetta Manunza even states that procurement rules are at the heart of the democratic process [62].

Very small contracts are often awarded on an individual basis. Larger contracts, however, usually involve a form of competition, such as by soliciting multiple bids. European tenders are usually conducted via a public procedure (77%), meaning any company may submit a bid and

€1,000,000 for the special sector. These thresholds have been established through calculations that take transaction costs and predicted international competition into account. In other words, less international competition is expected in the areas of construction and infrastructure, as compared to goods and services.
Most of the European tenders conducted by contracting authorities are for services (57%: public transport, facilities management, etc.) and – to a lesser extent – goods (30%: road salt, helicopters, etc.) and the rest for construction and infrastructure (12%: buildings, roads, etc.) [15].

all bids are final. Negotiation is prohibited. Sometimes, a contracting authority organises a pre-qualification round prior to the bid round (20%). In that case, only suppliers who make it through the pre-qualification are allowed to submit a bid. Most other tendering procedures (3%) include an innovation, negotiation or dialogue component [15].

In competitions, a contracting authority will award the contract to the supplier who meets the requirements and receives the highest score for one or more of the award criteria. These award criteria can be subdivided into price, quality, people and the environment:

- By price, I mean the potential procurement costs, usage costs and other costs. I use the word "potential" because procurement costs, usage costs and other costs are not always present. I didn't purchase this academic gown, for instance, but rented it via the University's regalia fund in exchange for a one-time fee;
- By "quality", I am referring to things like the comfort, appearance and fit of this gown. These are aspects noticed by the user, if no one else;
- By "people and the environment", I mean for instance CO2 emissions, circularity and working conditions. These aspects are often difficult to quantify and monitor, because they tend to happen out of our sight. The person who made this gown, for example, cannot monitor the working conditions under which every yard of fabric they buy was made. What they *can* do is choose to do business with a limited number of suppliers who they know, and cooperate with other purchasers to keep an eye on several signals, which I won't reveal at this time.

3 November 1635: little attention for tenders

Allow me to begin this brief history on a day, 3 November 1635, that has no particular link to procurement. Instead, I've chosen it because it involves (to my mind) a remarkable coincidence. This was the day that

Prof. Bernardus Schotanus delivered his inaugural address. In that same week, plus 385 years, I was originally scheduled to give this address – were it not for the pandemic that steamrolled over everything. From the day our University was founded, 26 March 1636, Bernardus Schotanus was a professor of both Law and Mathematics [16] – an unusual combination today – and served as the first Rector Magnificus of Utrecht University. To link this to procurement after all: in Bernardus Schotanus' day, there were not yet any tender regulations and public purchasing rarely involved a tender procedure. If it did, it was typically a kind of price auction.

11 November 1815: growing number of lowest price tenders

Not until (or as early as) 11 November 1815 did public procurement become a more serious field of study, with the first tender legislation. In those days, Dutch contracting authorities also made purchasing decisions based largely on price. This does not mean that quality was considered irrelevant. They attempted to guarantee minimum quality by establishing requirements. Sometimes there were social requirements as well, such as workdays of no more than 10 hours for specific government contracts [17, 18]. Usually, however, a tender would be won by the cheapest supplier who appeared to meet the requirements. Improvements in purchasing in this period include the introduction of contracts instead of verbal agreements, along with efforts to combat corruption. We became increasingly vigilant regarding the Don Savastanos of this world.

In short, the importance of public procurement and the knowledge regarding tenders gradually began to increase, while at the same time the government typically awarded contracts based on the lowest price.

16 August 1971: growing awareness of the importance of quality

The next date is the publication date of the first European directives regarding tenders. In response, the Dutch government drafted the first legislature that explicitly stated that purchasing could not be done based on lowest price alone, but that people *could* take quality into account as well.

This was an important bit of progress, as there are multiple drawbacks to lowest-price-based purchasing. For starters, purchasing based on lowest price places strong pressure on price alone (see also see Figure 1). The only "lever" that suppliers can "pull" to distinguish themselves is price. When you award contracts based solely on price, you will fail to reward suppliers who are bit more expensive, but also innovative and offer much higher quality than the minimum requirements. This gives suppliers an incentive to *just barely* meet the requirements and to do so as cheaply as possible. Suppliers also have an incentive *not* to report any errors in the tender documents during the procedure, and then seek to remedy those mistakes through surcharges after being awarded the contract.

Figure 1: procurement based on the lowest price

Despite the explicit possibilities afforded by the law and great efforts to induce contracting authorities to do more of their purchasing based on both price *and* quality, this practice is not yet widespread in all sectors. In 2008, the Dutch government awarded 70% of its European tender procedures for construction and civil engineering projects on the basis of the lowest price. This focus on price is also reflected in the European

tender forms that contracting authorities use to announce that a government contract has been awarded. The contract value is a required field – which, by the way, the Netherlands is by far the worst at completing of all member states – but you are not required to include the scores for qualitative award criteria.

In short, we now find ourselves in an era when more and more tender procedures are taking place in various sectors and these tenders still focus primarily on lowest price. We are, however, becoming increasingly aware of the drawbacks of this system in many cases.

1 April 2013: growing number of price and quality tenders

Some 200 years after the first Public Procurement Act in the Netherlands, Dutch purchasers were met with a remarkable occurrence. From 1 April 2013, it became *compulsory* to take purchasing decisions based on the best price-quality ratio (BPQR), unless there is a good reason for purchasing based on lowest price or costs. This had an effect. The percentage of tenders for major construction and infrastructure contracts awarded based on lowest price decreased from 70% in 2008 to 22% in 2021.
Now, it is also possible that the Act merely jumped aboard a trend that was already in motion. But when we look at Germany, for example, we can see that the number of tenders awarded based on lowest price is increasing. In 2021, 94% of construction and infrastructure-related procurement decisions were based solely on price, while in 2008 this was 50%.

The new Act has given rise to many developments. What we don't know, however, is precisely how effective this legislative amendment has been. Is the government actually receiving better bids now, and are they awarding contracts to better suppliers? You might initially expect this to be the case: there is now an extra “quality lever” that suppliers can “pull” to set themselves apart from the rest (see also see Figure 2). There is

now pressure to keep the price as low as possible and pressure to make the quality as high as possible. As a result, suppliers who offer better quality, but are somewhat more expensive, now have a chance to win tenders as well.

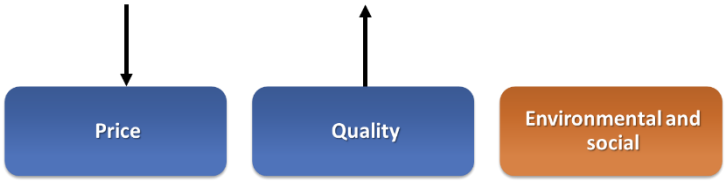

Figure 2: procurement based on price and quality

On the other hand: while it might be a good idea to purchase based on price and quality, contracting authorities might have trouble doing so efficiently and effectively. Or perhaps suppliers with "connections" are taking advantage again, by using those connections to obtain better evaluations. This is one of the topics that Marly Celis, Vítězslav Titl and I will be exploring in our research. What are the positive and negative effects of requiring that procurement decisions be based on price and quality? In doing so, we will expand on Titl's previous work aimed at political connections and public procurement [19, 20, 21]. In this regard, I also think a better world starts with public procurement when it comes to preventing and combating corruption in connection with government activities. Various studies aimed at government activities that are sensitive to corruption have placed public procurement at or near the top of the list[13].

We do already have an idea of general trends prompted by the legislative amendment. For example: tender help desks and tender consultancy firms popped up to help suppliers compile their bids, which were

[13] One example of a successful effort to combat corruption is the 2015 introduction of a transparent and open source public procurement system (ProZorro) in Ukraine [61].

required to be SMART and to "unburden" contracting authorities[14]. Contracting authorities still make mistakes with supplier selection models. Price has still often been the determining factor, consciously or not. People are still using relative scoring methods for price, despite repeated warnings from lawyers, business experts and economists that we should not do so [22, 23, 24, 25]. In addition, so-called monetary awarding methods are not always applied as intended. Common mistakes include giving far too little or far too much weight to quality.
Still, we learn by doing and our ability to conduct our purchasing based on price and quality is growing. For example, the HIS (a large government purchasing group for six ministries) only makes use of relative scoring methods in exceptional circumstances.

In short, though we do not always succeed (yet), we are getting better at taking purchasing decisions based on price and quality.

28 October 2019: growing awareness of the importance of people and the environment

When contracting authorities conduct their purchasing based on price and quality, it does not automatically mean their decisions are also environmentally friendly or socially minded. This is because a high-quality product is not necessarily good for people or the environment. You experience this yourself as a consumer. If you consider only price and quality when buying things for yourself, you will not purchase organic products or products with a "real" quality mark and you will book a flight for short trips rather than taking the train.

If a government takes only price and quality into account in its purchasing, the contract will typically go to a supplier with a larger environmental footprint or one who pays less attention to social aspects,

[14] I consider it unwise to use either word when evaluating bid quality, as they are not specific enough.

because this supplier will generally be cheaper than a socially-minded supplier with a small environmental footprint. When you procure goods and services based only on price and quality, what you pay is often not equivalent to the true cost to our society. The new Central Government Procurement Policy that was published on 28 October 2019 represents an effort to affect real change in this area. One idea put forth in the new policy is that the *core task* of public procurement is to promote the interests of people, the environment and innovation.

If contracting authorities want to pay more attention to people and the environment in their purchasing, there are three levers they can pull (see figure 3)[15]: one for the lowest possible price, one for the highest possible quality and one for the largest possible contribution to people and the environment[16].

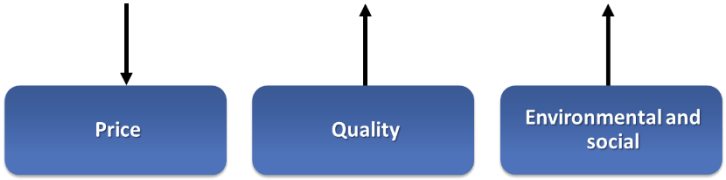

Figure 3: procurement based on price, quality, people and the environment

Although purchasers must explain their decision when they did not take *quality* into account when awarding a contract, purchasers do not have to offer an explanation when they have not taken *people and the environment* into account. This is odd, since you *are* required to explain seemingly smaller decisions that are in the interest of SMEs, such as clustering and not dividing a project into lots (see also section 3.4). If the Public Procurement Act is amended, I hope that the lobbying for people

[15] Or four, if people and the environment are counted as two separate themes.
[16] This has become quite complex for many tenders. It is also possible to imagine simpler alternatives, such as establishing fixed levels of price and quality (by means of minimum requirements) and then using sustainability as the sole award criterion.

and the environment is stronger (or at least as strong as) the lobbying for other interests.

The above – i.e., not needing to explain your non-sustainable purchasing – would not present a problem if every purchaser always took people and the environment into account. But as I said before: that is not the case. And when they do, the theme is often an afterthought.
There would also be no problem if sustainable public procurement were not effective. But that is not the case, either: while truly circular public procurement (not *green washing*) is not always effective (yet), it very often is [26]. Organic public procurement will also lead to real change in the form of a more sustainable supply [27], which might benefit businesses and consumers as well. And the Netherlands is by far the frontrunner when it comes to deploying zero-emissions buses for public transport [28], which can be traced back to a nationwide covenant that set out purchasing-related agreements concerning buses and renewable energy.
In conclusion, the purchase of non-sustainable products and services would not be a problem if there were no sustainable (potential) options available in the market. Yet we can see that some contracting authorities do purchase sustainably in certain markets, which indicates that sustainable options are present, while other contracting authorities purchasing in the same markets do not choose sustainable procurement. This is what the initial studies conducted in connection with the chair show [29, 30]. Other studies support this perception. Zijp and colleagues [26], for instance, demonstrate that even for product groups where experts say that circularity is vital, only 43% of tenders devote attention to this aspect.

In short: we currently find ourselves in a remarkable situation in which purchasers must explain various decisions, but are *not* required to explain themselves if they do not take people and the environment into account. In an era in which the Intergovernmental Panel on Climate Change (IPCC) states that emissions must be drastically reduced no later

than 2030 and that public procurement has an important role to play in that regard, contracting authorities are still often purchasing in a non-sustainable way.

Part 2: A world of possibilities for achieving more sustainable procurement today

Let us now move from the past to the present day. If a better world starts with public procurement and contracting authorities are still not taking enough sustainable procurement decisions, what steps can we take today to help this happen? In part 2 of this address, I will be talking about three topics that can help contracting authorities achieve more sustainable procurement: procurement policy, purchasing process and procurement technique. I am not trying to say that other topics are less important or irrelevant. For instance: sustainable commissioning and sustainable contract management are vital as well. But given the time available, I will limit myself to three topics for now. Where relevant, I will also indicate how we are contributing in connection with each topic via the chair.

1. Procurement policy: providing direction for sustainability

Procurement policy is an important instrument for providing direction to sustainable public procurement and, in doing so, to accelerate its implementation. As a result of its procurement strategy "Procurement with Impact" and the corresponding action plans, the Dutch central government roughly doubled its sustainable procurement in less than a year. This was the conclusion of a study Van Berkel and I conducted [30]. In our research, we also investigated the degree to which municipalities have begun adopting more sustainable procurement practices. During that same year, sustainable procurement by municipalities – which are not subject to the central government procurement strategy[17] – remained virtually unchanged for similar purchases.

[17] Municipalities were chosen as a control group because they did not fall within the scope of "Procurement with Impact" and we suspected that their procurement policy regularly failed to provide direction in terms of sustainable purchasing.

While we already have a good grasp of the process by which a policy document is created, as well as the obstacles to and incentives for sustainable procurement, as far as I know there has not yet been a study that shows which concrete *substantive* themes are effective in sustainable procurement policy, and when (potentially in combination with each other). I do have a few themes in mind that might be interesting avenues for further research. Five of these are addressed in the following sections.

1.1 Sustainable procurement as the standard, any non-compliance must be explained

Sustainable procurement is still often viewed as optional (or too much at the purchaser's discretion) [31]. It is possible to reduce this perceived voluntary aspect by using procurement policy (or an action plan or a manifesto) to make purchasing based on price, quality *and* people and the environment "the standard". Unless, of course, you have a compelling reason for not doing so (*comply or explain*)[18]. For instance if the situation is truly urgent. This explanation must be offered not only internally but externally as well. That way, suppliers who are interested in participating in the tender procedure can lodge an objection if the explanation is insufficient. Other stakeholders such as social organisations and citizens can do this. The idea is that the "explain" portion should not be too easy.

There is still a risk that purchasers will copy one another's explanations after seeing which ones are accepted as a reason for failing to purchase sustainably. This, however, assumes a situation in which purchasers do not *want* to practise sustainable procurement. As Bregman [32] would

Timpen and Campfens confirmed our suspicions: their study showed that many municipalities still rely on outdated procurement policies [36].

[18] The obligation in question is a general one that can be met through sustainability requirements, award criteria, a sustainable purchasing model and so on. It is not, in other words, a specific obligation such as a requirement to use a label or apply a sustainability-related award criterion.

say, I believe that most purchasers (and vendors) are fundamentally decent. I *do* hope that purchasers will start to emulate each other more, but that the behaviour they will mimic is successful sustainable procurement techniques. Even though we were taught in school that it's wrong to copy others, copying can also be a very useful strategy [33]. The only trouble is that our current procurement systems were not designed with copying each other in mind. While centres of competence such as PIANOo help publicise good examples, no one procurement platform offers access to all procurement documents. Many procurement documents that should actually be available to the public remain hidden behind log-in screens or complicated websites. What's more, European and national procurement platforms such as TED and TenderNed do not yet include a review function, which could be used by suppliers and purchasers to indicate good and less good examples.

"Comply or explain" rules can be supplemented by minimum effort requirements, such as compulsory use of sustainability certifications, a social return percentage or the European "GPP award criteria". The advantage of this is that it is relatively simple and promotes standardisation. To my mind, minimum efforts such as certification or quality marks should always be supplemental requirements – because if only a minimum effort is required, it seems likely that efforts to achieve sustainability will often go no further [34]. There is also a risk – in light of the great diversity among tenders – that requirements or wishes in connection with standardisation will not be feasible, that there will be no room for custom solutions or that there will be lack of support. The fact that requirements or wishes are listed on the procurement documents is also no guarantee that they will be met. So on paper, the procurement could be "100% sustainable" because the requirements have been met, while in practice, the impact could be limited to the default "standard" for the market.

1.2 Assigning priority to procurement categories

Policy that mandates sustainable procurement also gives rise to the challenge of determining which social and environmental aspects are most important to consider in a given purchasing process. After all, capacity is limited and sustainability is a broad concept. Procurement policy can provide direction in this area by assigning priorities. Above all, procurement policy should focus on the procurement categories that have the greatest impact on people and the environment. Then, for each prioritised procurement category, you can indicate what type of sustainability is most important, as was set out in "Procurement with Impact" as well. For the category of external hiring, for instance, inclusion and diversity are more important. For the category of infrastructure, circularity and CO_2 emissions are more important.

1.3 A standard decision-making tool for every tender

While I don't know the exact number, medium-sized and large Dutch contracting authorities conduct hundreds if not thousands of (often very diverse) procurement procedures each year. Procurement policy is too generic to tell you exactly which purchasing decisions to make in every single procedure.

You can, however, use procurement policy to dictate that people decide on a case-by-case basis which social and environmental aspects are most relevant to focus on in a given tender, for instance with the "ambition web" tool. A necessary precondition for the themes that will be the focus areas is that these should be high-impact, quantifiable and possible to monitor, as well as distinctive and feasible. Case-by-case decision-making is also reflected in how the academic-regalia maker purchases their fabric. For example: what level of ambition is feasible for the "bio-based" aspect in the ambition web? Is it possible to make gowns out of bamboo, or is that an overly ambitious aim?

1.4 Use supplier selection models to offer direction

Supplier selection models are another tool contracting authorities can use to achieve more sustainable procurement. To that end, procurement

policy can offer direction for the entire organisation. Below, I will provide three examples:

1. *Best price- quality-sustainability ratio rather than best price-quality ratio*
   In the term best price-quality ratio (BPQR), the aspects of people and the environment are covered by the word "quality" – and as a result, there is a risk of them being forgotten, added only as an afterthought or given too little weight during consideration. By making the best price-quality-sustainability ratio[19] the standard in your request for proposal templates and supplier selection models, with a starting value of 33% for each component (to be refined later depending on the situation), you can place the consideration of sustainability on equal footing with price and quality;
2. *A stronger impetus for high sustainability but not for high quality*
   Scoring tables for evaluating quality-related award criteria nearly always reward the supplier who offers higher or much higher quality than what is considered a "satisfactory" level of quality. While it isn't necessary to abandon this entirely, you can choose to make the "standard" for this incentive smaller. For instance, by changing the scores for quality in column 2 of the following table to those in column 3.

[19] "Sustainability" here stands for people and the environment.

Evaluation	Old quality score	New quality score
Excellent evaluation, comparable with around a 9 out of 10 or better	100%	100%
Good evaluation, comparable with around an 8 out of 10	75%	90%
More than satisfactory evaluation, comparable with around a 7 out of 10	50%	80%
Satisfactory evaluation, comparable with around a 6 out of 10	25%	40%
Unsatisfactory evaluation, comparable with around a 5 out of 10	0%	0%

Table 1. Old and new scores for quality

This creates a quality incentive for suppliers to offer at least "more than satisfactory" quality, but after that point, there is no strong incentive for them to make further investments in quality. In essence, you are saying that more than satisfactory is "good enough".

For sustainable award criteria, you will again use column 2. This creates an incentive to offer more than "more than satisfactory". I suspect that in many situations, this is an appropriate means of evaluation for contracting authorities, especially when it comes to facility-related purchasing;

3. *Absolute scoring methods rather than relative scoring methods*

   What scoring tables do is provide direction and/or guidance to suppliers as they draw up their bids. Not only do so-called relative scoring methods for price[20] fail to provide a clear direction, they also

[20] Relative scoring methods for price are frequently applied by various contracting authorities. These are standard methods that generally assign a number of points for price relative to the lowest bid received during a procurement procedure. For example: points = 100 - 50 x (supplier's price / price from lowest bid). An example of an absolute scoring method is: points = 50 x ((€10,000 - supplier's

create a strong incentive to offer the lowest price possible. The reason for this is that relative scoring methods – as opposed to absolute methods – do not set a minimum and every euro deducted from the price yields more points for the cheapest supplier, while at the same time lowering the scores of the other suppliers. The absolute cheapest supplier therefore has a better chance of winning the tender. This often comes at the expense of criteria other than price. Consequently, relative scoring methods are bad for quality, people and/or the environment. While relative scoring methods are still legal (although they have been outlawed for public procurement in Portugal), you are free to adopt procurement policies of your own which prohibit the use of relative scoring methods. There are other reasons to do so as well, such as the risk of *rank reversal* [23] and a less favourable price- quality ratio [35].

1.5 Annual targets that are monitored and reported

Lastly, in terms of dynamic procurement policy, it is important to establish targets (annual or otherwise) that work step-by-step towards objectives for 2030 similar to those formulated in the Dutch government's "Procurement with Impact" strategy document. Annual targets are easier to track and potentially more effective than simply setting a goal for 2030. Having the accountant check whether these targets have been achieved and making the results public creates more pressure to increase the sustainability of your purchasing habits. A tool like MVIZET.nl may be required to facilitate the measurements needed for this purpose; its use is already compulsory for a number of contracting authorities.

1.6 From outdated and general policy to guiding policy

Many current procurement policy documents still offer little direction to organisations apart from the passages that were part of the original

price) / €2,000). This is a straight line that runs from €8,000 (50 points) to €10,000 (0 points).

Public Procurement Act in 1815: threshold amounts for the competition requirement, such as when three or more bids must be solicited. Organisations often supplement this with guidelines for social return and the potential requirement to invite a local supplier. Yet procurement policies often also include sentences such as "we only do business with suppliers who show integrity", "quality plays an important role" and so on. While the intentions here are good, they don't offer much in the way of direction. While certain examples of procurement policy, besides "Procurement with Impact", do supply more direction – the municipal procurement policies of Amsterdam and Utrecht, for instance – this is often not yet the case. Timpen and Campfen [36] also state that the sustainability clauses in municipal procurement policies tend to be (overly) general and outdated. When elements such as those mentioned in the preceding sections are incorporated into procurement policy, procurement policy becomes more than just a document that mostly echoes legislature and establishes general goals and threshold amounts – instead, it becomes a source of real direction for sustainable procurement.

1.7 In conclusion

In short, procurement policy offers you a way to take important strides to accelerate the transition to sustainable procurement. But this obviously depends on whether you follow up on it, such as by means of action plans. I view implementation and ensuring sufficient support for policy as the major challenges for sustainable procurement policy. Procurement policy is relevant for many employees besides just the purchasers, and when purchasing is done by non-purchasers, there is still a large amount of leeway in how things are done[21]. While other causes exist as well, this could potentially be the cause of tendering non-compliance in the Netherlands: i.e., cases when a national or European

[21] The perceived voluntary nature of procurement policy, or the lack of familiarity with policy among non-purchasing employees, stands in stark contrast to other organisational policies, such as policy in relation to claiming expenses or commuting to work. People do not tend to view those policies as optional.

tender is called for and no such tender is held[22]. Recent examples of unlawful and ineffective procurement procedures that have made the news were also examples of procedures in which no purchasing department was involved or the recommendations from purchasing were not followed.

Through this chair, we want to contribute to policy and related areas such as subsidy requirements and legislation by:

- Gaining insight into the mechanisms which explain the impact of procurement policy (research category 2: understanding mechanisms);
- Exploring the effectiveness of procurement policy (research category 3: measuring effects);
- Indicating which combinations of different policy elements lead to more sustainable purchasing, and when (research category 4: offering direction).

An important theory in this regard is institutional theory [37]. To summarise, this theory explores how the behaviour of organisations is influenced by laws and policy, professional standards and beliefs, and by mimicking others. While these forces were addressed in the previous sections, they would not appear to be used to maximum advantage. For example: we are not yet required to give an explanation for our non-sustainable purchases, it is not that easy to copy each other and, while use of an extensive handbook is required for proportional procurement, there is no sustainability handbook or similar resource prescribed by law.

[22] Sometimes an attempt is made to resolve this non-compliance on paper through questionable arguments, such as appealing to urgency when there was no urgency; or awarding a contract to an organisation that has no obligation to tender; by dividing project contracts into smaller contract lots; by awarding a contract with a concession (because concessions have a much higher threshold amount) for a contract that is not a true concession; or by setting up a dynamic purchasing system for external hiring via a simple, directly awarded contract.

Examples of the research we are conducting to expand on the aforementioned research topics are: a study by Celis, Titl and myself aimed at the effects of "comply or explain" requirements and a study by Van Berkel and myself, which looks at the effects of "Procurement with Impact". Other examples are a chapter on institutional theory and compulsory sustainable procurement that Ruben Nicolas and I are writing, as well as the study Nicolas is conducting with Titl and myself to explore the effectiveness of sustainable procurement requirements that are linked to subsidies.

2. Purchasing process: a step-by-step guide for sustainability

2.1 The six steps of the familiar purchasing process

The next topic I'd like to discuss with you concerns the steps to be taken during a procurement procedure. In the Netherlands, these steps are usually set out in much the same way as Arjan van Weele did in his own inaugural address in 1990[23], as depicted in figure 4 [38].

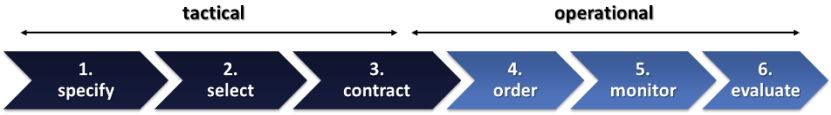

Figure 4. The six steps of Van Weele's purchasing process [38, 39]

Van Weele describes a process in which the procurement team gives specifications, after which the supplier is selected and and a contract is issued. Next, the user places the order and the contract manager monitors the delivery. The procedure concludes with follow-up and evaluation. Although Van Weele put forth a cyclical step-by-step model

[23] The follow-up and evaluation step was added later.
One figure worth noting in Arjan van Weele's lecture was the purchasing volume of the Dutch government. Thirty years ago, this was around 40 billion guilders, which works out to about €34 billion today. This shows the extent to which government procurement has grown in recent decades.

in 1996, Jan Buter and Danny Loa [41] did so in 2007, and multiple new step-by-step models have been developed since, Van Weele's six steps are still commonly used today.

2.2 Expanding on the six steps

While the original six steps from Van Weele are often still the ones used, they are no longer sufficiently complete if we want to purchase more sustainably. Several vital steps are missing, which is something we are more aware of now than 30 years ago. For example: there is no explicit exploratory step, in which you explore the procurement need and the market, talk to potential suppliers and weigh whether you need to buy something, in which form (leasing, renting, buying (new or second-hand, possibly with a buy-back guarantee) or sharing) and whether that could be done jointly with other contracting authorities. Certainly the decision to purchase new or second-hand (or not at all) is a consideration that can make a tremendous difference in terms of budgets and sustainable impact. In my experience, it is also a decision where people are often not explicit enough about weighing their options. Contracting authorities are still frequently being pulled into urgent tenders or – due to limited capacity – cannot get around to it at all.

Another important step is looking for ways to extend the useful life of a purchase during the implementation stage, such as by repairing, restoring or re-purposing it [40]. Other than that, there is not always an order process (step 4 in the original model), while an implementation phase is quite common (but is not included in the original model). The word "monitor" in step 5 also suggests that the contract manager has a monitoring role – yet their role is broader and includes (among other things) facilitating the supplier and cooperating with the supplier in order to achieve a certain goal. Further, the word "operational" (listed above step 5) could suggest that the job of contract manager is not a strategic or tactical position.

And finally, a linear representation suggests that a linear purchasing process is always present, despite the fact that the process is usually

cyclical and increasingly often circular in nature: we purchase and use a product, then apply the experiences gained to start a new procurement procedure, reusing materials whenever possible.

2.3 From a linear step-by-step plan to a circular one

If we incorporate the aforementioned points into a new step-by-step plan, the result will be figures 5 and 6. In this step-by-step plan, various words have been changed to reflect the terminology more commonly used in the public sector; several steps have been added, one step has been removed and the words “tactical” and “operational” have been replaced with the three Ps: Prepare, Purchase and Perform.

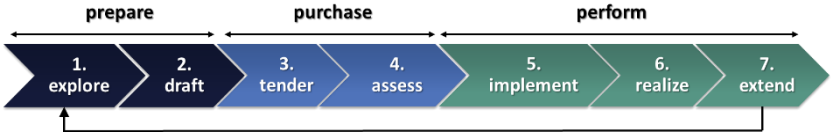

Figure 5: the three Ps and seven steps of the purchasing process

Figure 6: more detailed diagram of the three Ps and seven steps of the purchasing process

2.4 In conclusion

In short, I feel that the purchasing process should not be depicted as a linear process that moves from specification to follow-up. There are now additional considerations that virtually every purchaser will need to have in their repertoire and which must be included in any step-by-step plan for procurement.

Through this chair, we want to contribute new insights in connection with this topic by studying different ways to organise sustainable procurement procedures. For instance, by:

- Monitoring the extent to which attention is being paid to circularity in steps 3 and 7 of the procedure (research category 1: monitoring developments);
- Researching how contract management (step 6) affects efforts to realise sustainability (research category 3: measuring effects);
- Indicating when sustainable procurement is the most effective way to reduce the environmental footprint of suppliers (research category 4: supplying direction).

An important theory in this regard is the principle-agent theory [42]. In short, this theory deals with situations in which a supplier thinks mainly of their own interests rather than those of the customer. They might, for example, focus on minimising costs while maximising profit, which is detrimental to quality. To prevent this, we apply tools such as contracts, bonuses and penalties, monitoring and contract management. For sustainability, the interests of suppliers and the government could be much more aligned compared to price, especially if contracts are awarded to social entrepreneurs (see also section 3.1). This will make it easier to trust that suppliers will actually achieve the level of sustainability they have promised in their bids. On the other hand: sustainability is more difficult to monitor than price and quality, which can make it more tempting *not* to live up to sustainability-related promises. We must therefore remain vigilant against the Don Savastanos of this world.

Ruben Nicolas, Helen Toxopeus, Willem Janssen and myself are researching how to approach the actual achievement of sustainability promises in a study aimed at organising contract management in such a way that it leads to sustainable results.

3. Procurement technique: carrying out a sustainable procurement procedure

People often think that, besides price and quality, sustainable procurement is about implementing requirements and award criteria that have to do with people and the environment. Whether such requirements and award criteria have been implemented is an important indicator of the extent of sustainable procurement, but there are also other possibilities. In this portion of my lecture, I will provide a few examples to illustrate the diversity of these possibilities, though I do not want to suggest that these are exhaustive. Other potential techniques include establishing a social contract with shared sustainability goals, earmarking budgets for increasing sustainability, sustainable innovation lots and so on. For now, I will limit myself to four examples.

3.1 Selective invitations below the tender thresholds

I will begin with a technique similar to the one used by the gown maker: they do not apply sustainability-related award criteria – which would be difficult for them to measure and monitor – but instead do business with fabric suppliers who have a good track record. In doing so, they remain vigilant against the Don Savastanos of this world. Once trust has been damaged, the relationship with the supplier won't last long.

While this technique cannot be applied in identical fashion for public procurement, it can go a long way toward helping us reach our goals. This is especially true for procedures below the European tender thresholds, as these are subject to fewer regulations. The good news is that around 96% (the vast majority!) of public procurement procedures are below the thresholds for European tendering.

Applying the technique below the thresholds means more frequently or exclusively choosing to invite sustainable[24] or social entrepreneurs to submit a bid for your contracts [43]. So for a contract worth €25,000, for example, you will invite a current supplier and one or two social entrepreneurs to submit bids, so that the latter will more often have a chance of being awarded a contract. This doesn't necessarily create *more* competition, but I think it does create *better* competition [62].
The system is not watertight, of course, and is not always possible, but that goes for sustainability-related award criteria as well.

How can you determine which companies you should invite to submit a bid more often? There are various lists of social enterprises out there. Market research can be helpful here as well, and you can also take previous positive experiences with suppliers into account. As far as I know, taking previous positive experiences with suppliers into account when inviting suppliers to submit a bid is common practice below the thresholds, yet seems so far to be aimed "only" at the price-quality ratio.

While these kinds of techniques can also be used for tenders with a value above the threshold for the European tender procedure, in most cases, that will involve not so much a requirement as a nudge. For instance, by stating that your tender is aimed explicitly at startups or scale-ups and by pro-actively inviting these groups to submit a bid. There is also an exceptional provision for research and development contracts, which allows you to direct these contracts specifically to smaller businesses. For example through Small Business Innovation Research (SBIR) competitions, which (as compared to in the United States) are hardly ever used in the Netherlands[25].

[24] You can also invite businesses that are currently relatively less likely to be awarded government contracts, such as minority-owned businesses or companies owned by women.
[25] In 2021, eight Dutch SBIR competitions were announced via TenderNed. In that same year, 5,480 SBIR competitions were announced in the United States [60].

3.2 Making use of sustainability requirements

While there are a number of drawbacks to establishing requirements for sustainability and then awarding based on price and/or quality, as described in part 1, these can sometimes be mitigated. One way to do this is to conduct a market consultation aimed at sustainability requirements prior to beginning the tender. The question, in that case, is how far you can go with your sustainability requirements before you have eliminated every possible solution. Requirements stating that 100% of materials used in a product must be reusable, for example, can result in no solution, an extremely expensive solution or one of inferior quality. This despite the fact that, for a portion of the market, a requirement of 99% could actually be feasible. Making this a requirement (rather than a desire) means you do not have to compare bids based on this aspect, which can be tricky. The Dutch Directorate-General for Public Works and Water Management applies a similar procurement technique in connection with some purchases, such as asphalt. But a requirement alone is not enough, of course. Checks such as random sampling remain needed to prevent the Don Savastanos of this world from making misuse of this procurement technique.

3.3 Making use of modern procurement models

Traditional procurement assumes that you will be *buying* the goods or works in question. This form of purchasing fits well with buying vital infrastructure, but does not foster efforts to decrease environmental impact or increase circularity. Possession of the goods or works is transferred from the supplier to the purchasing organisation. This does not necessarily promote reuse, because what is a purchasing organisation supposed to do with a previously-used product? For a purchasing organisation, that product is often waste and finding a new use for it costs time and energy. The situation is different when the supplier retains ownership, such as when purchasing things “as a service”. If anyone needs to be able to reuse as many of the materials as possible at the end of the product lifespan, it's the supplier.

Among today's students, buying secondhand is also much more common than it was when I was at university. While carsharing was already around back in “my” day, there are a lot more options in that area now. Government purchasers can make use of these kinds of techniques. Our university, for instance, purchases secondhand office furniture when there is no spare furniture available somewhere else. We only buy new goods when no secondhand supply is available.

3.4 Knowledge of the market and more accessible procurement documents
Social entrepreneurs are usually small-business owners who do not always speak the language of regular tenders. As a result, they may not be reached (or less effectively reached) by large tenders, as shown by sources including research conducted by my colleagues Niels Bosma, Erik Stam and Siri Terjesen [44]. It is often said that the way to get small business owners more involved in tenders is to split them into smaller lots. The Dutch Public Procurement Act even includes a *prohibition on clusters* and a *splitting requirement*. Except I would have preferred to see a *prohibition on inaccessibility* and a *market research requirement*. First of all, as I explained in part 1, the vast majority of government contracts are already relatively small contracts to begin with. But no matter how large a contract, splitting it will have little or no effect if the pieces are not accessible or if small (potentially social) entrepreneurs from below the thresholds are not invited to submit bids because no one has conducted market research.

Efforts are being made to increase the accessibility of tender documents on multiple fronts; these include strong examples such as startupinresidence.com, tendering on three pages and even tenders in the form of a comic book. Wondering how to recognise this kind of example? Easy: none of them resemble a tender procedure. So if you want to open an accessible tender, you should in any case make sure that it doesn't look like one.
I expect, by the way, that we will be obligated to conduct accessible procurement more and more often in future as a result of the growing

scarcity of personnel and resources: suppliers will be increasingly able to take their pick. In that case, *becoming a customer of choice* [45] will be increasingly important.

For the person who makes the gowns, *knowledge of the market* is extremely important. If they don't know their market, they won't know what a reasonable price looks like or be able to identify quality and sustainability options or recognise suppliers that are good at both. Market research and market consultations are crucial for government procurement as well. Not because they enable contracting authorities to identify the sustainability measure that will enable the tender to have the greatest impact, and provide a way to explore that question, but also to help them gain a general picture of the market. For most tender procedures, this will be a bit more complicated than our example with the gown maker. The gown maker deals primarily with a single market: the fabric market. Government purchasers must interact with a great many markets. While there is no way for us, as purchasers, to have comprehensive knowledge of every single market, market research and market consultations can take us a long way in the right direction. Especially if we make smarter use of the total procurement capacity by reducing redundant efforts and by sharing the results of market research and market consultations with a wider audience. Technology can help us here, too. Imagine how convenient it would be if, in connection with any given planned tender, we were able to enter a single search term on a national procurement platform and find the latest insights from the specific market.

3.5 From sustainability requirements and criteria to a broad spectrum

The preceding sections show that purchasers have a broad spectrum of procurement techniques at their disposal for purchasing sustainably, and that not all of these are complex. There are also two reasons why this broad spectrum is relevant for scientific research and important for reporting purposes.

First, if we want comprehensive insight into the extent of sustainable purchasing, it is not enough to focus on requirements and award criteria alone. This is important for domestic and European reporting on sustainable procurement and for our future research. At the moment, many of the procurement techniques discussed in the previous sections remain difficult to study due to incomplete data. Increasing use of open data, however, will in the long term yield increasing possibilities for conducting research into this topic.

Secondly, if procurement with sustainability-related award criteria is too complicated or not quantifiable enough for local authorities, the aforementioned procurement techniques can serve as simpler alternatives that are potentially almost or just as effective. Criticism regarding the measurability of sustainability-related award criteria is only partly deserved though. While not every aspect can be measured and monitored with equal ease, there are some examples that can be: a car powered by electricity rather than petrol, or a new building that requires the contractor to reuse materials from a building being demolished. There are also various tools that facilitate efforts to measure sustainability, such as the environmental cost indicator, the CO_2 performance ladder, social performance ladders, the European Commission's life cycle cost tools, and so on.

3.6 In conclusion

In short, a wide variety of procurement techniques are suitable for sustainable purchasing. These include not only selective invitation, consulting the market with regard to sustainability requirements, modern procurement models, buying second-hand, as a service or sharing more with each other, but also the various examples I listed at the beginning of part 3. For instance: entering into a social contract, sustainable innovation lots and so on.

Through this chair, we want to contribute insights on the topic of procurement technique by researching a variety of sustainable procurement techniques. We intend to do so by:

- Monitoring the extent to which various (sustainable) procurement techniques are applied and disseminated (research category 1: monitoring developments);
- Studying the impact of different (sustainable) procurement techniques (research category 3: measuring effects);
- Indicating which of the various (sustainable) procurement techniques can best be used in which situations (research category 4: supplying direction).

An important theory in this regard is portfolio theory [46]. This theory can be summarised as the idea that different procurement situations call for different procurement techniques. While the principle is not entirely the same, this idea applies to sustainable procurement techniques as well: different purchasing situations call for different techniques.
In previous research, we already conducted a general exploration of the effects and/or effectiveness of several procurement techniques [47, 23]. For future studies, we will use techniques including comparative research. This means we will compare and contrast quantitative aspects of similar tenders that made use of different techniques. Where needed, we will enrich this kind of research with qualitative data in order to better understand the underlying mechanisms at work in specific procurement techniques (including sustainable procurement).

Part 3: Looking ahead to the future and the contribution of the chair

I began this address with a look back at the past and then discussed a few examples we can put to use today in order to purchase more sustainably. I'd like to conclude this lecture by looking ahead to the future.

It is the year 2222. Babette Schotanus has just been appointed a professor here at Utrecht University. If, in her inaugural address, she were to look back at our time, what will she conclude?
Would people and the environment be central to the Public Procurement Act?
Did governments at some point started buying less – while still realizing similar outcomes – instead of each other year more?
Will we have successfully transitioned to sustainability and did public procurement make a vital contribution to that success?

I am optimistic. If you were paying close attention, you will have noticed a positive trend in the subheadings I used in part 1. Starting in Bernardus Schotanus' day, the number of public tenders gradually increased, with most contracts being awarded based on price. Next, although people became more aware of the importance of quality, it still took a long time to see substantial growth in the number of contracts awarded based on price and quality in every sector. Today, awareness of the importance of sustainability continues to grow – yet it may still take a long time to see substantial growth in the number of contracts awarded based on price, quality, people and the environment in every sector. As I explained in part 2, if we want to accelerate that process, there are several actions we must take.

I am confident that it is possible to kick-start such acceleration. Many contracting authorities are quite willing and eager. We have many good

examples, from the way the gown maker purchases their fabric to the procurement of climate-neutral and circular buildings. There is a plethora of ICT/technological options to choose from. And while I don't have any spoilers as to the fate of the Don Savastanos of the world – those who might obstruct sustainable procurement – I can tell you that things didn't work out so well for Don Fredo Corleone.
The acceleration will undoubtedly be difficult and is likely to proceed in fits and starts – much the same as the acceleration of purchasing based on price and quality. But let us scale up our efforts to gain practical experience with sustainable procurement as soon as possible.

Through this chair, we want to contribute to accelerating (1) sustainability (doing the right things) and (2) efficient and effective procurement (doing those things right) by offering greater insight into the monitoring and explanation of sustainable and non-sustainable purchasing behaviour. We also want to show the impact of this and what is and is not effective.
And it is not only we academic staff who are doing this, but also students who are taking the Public Procurement course and final-year students. We are doing it not only through scientific publications but also via other channels such as professional journals, conferences and social media. And we are not doing it alone: we are also pursuing cooperation outside our School of Economics by partnering with networks such as Nevi, PIANOo, IPSERA, IRSPP, WION, and of course the interdisciplinary Utrecht University Centre of Public Procurement (UUCePP) and IOS. These partnerships also ensure that the research we conduct is original, builds on work in multiple disciplines and is socially relevant. This is also in keeping with the objectives of our School: we want to contribute to an economy that allows people to flourish. We are using other disciplines to enrich the economy in order to more effectively solve problems and identify opportunities, from both the business community's and the government's perspectives. Strong in terms of science and socially relevant. *The real-world perspective*.

Allow me to look ahead to the future once more. If Babette Schotanus concludes that we have been successful in achieving acceleration for sustainable procurement in the Netherlands, Europe and the rest of the world, then I am confident that she will also conclude that this has made a valuable contribution to creating a better world. If you agree with me that a better world starts with public procurement (or that it deserves a front position in the race, at any rate), then this address is not only the inaugural lecture of the chair, but also a call to everyone who is involved in public procurement – from administrators, budget holders and purchasers to contract managers – saying: buy more sustainably more often and share your experiences, when things work out and when they don't. Be prepared to take additional risks, try out new techniques and put in extra time and energy. Because we have an opportunity to pick up the pace. At the moment, we often do not purchase sustainably, even though we could. If you ask me, at least for contracting authorities the rule should be that:

"When we *can* purchase sustainably, we *must* do so."

This asks a lot of organisations such as contracting authorities and suppliers, but also of individuals like you and me. To start procuring in a substantially sustainable way, there must be change agents throughout the entire organisation who work to achieve this goal. Being a change agent is (probably) not in your job description, but it doesn't need to be. The idea is that you should feel shared responsibility for creating a better world [48]. And that you should go that extra mile to ensure sustainable procurement, public and otherwise. Because in the end, more sustainable public procurement starts with you.

Ik heb gezegd.

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On 1 December 2019, Professor Fredo Schotanus was appointed professor at the Faculty of Law, Economics and Governance of Utrecht University, specialising in the field of Public Procurement. On one hand, this endowed chair focuses on doing the right things. On the other hand, the chair is concerned with doing those things right. In the context of public procurement, this means that we want to investigate how sustainable procurement can be accelerated (more often doing the right thing) and how we can buy more efficiently (doing things right). This chair is made possible by contributions from the Ministries of Defence, the Interior and Kingdom Relations/Directorate-General for Government Organization and Justice and Security; the Municipalities of Amsterdam and The Hague; the Dutch Tax and Customs Administration; the National Police; The Hague Purchasing Cooperative (HIS); the Employee Insurance Agency (UWV) and Stichting Rijk, in cooperation with Nevi. The new role of Professor Fredo Schotanus also involves collaboration with the Utrecht University Centre for Public Procurement.

In his inaugural address “A better world starts with public procurement”, Professor Fredo Schotanus argues that contracting authorities have an important role to play in creating a better world. This starts with the way they purchase services, goods, buildings and infrastructure. With procurement that focuses not only on the traditional factors of price and quality, but which takes people and the environment into account as well – in other words: sustainable procurement. Yet many contracting authorities could conduct their purchasing more sustainably. Based on the themes of policy, purchasing process and procurement technique, the lecture discusses various possibilities for more sustainable procurement and for promoting that increased sustainability in purchasing. An important overarching message is that accelerating the transition to more sustainable procurement will require making sustainability less voluntary and more obligatory.