LIFE-CYCLE THINKING (LCT)
IN EU PUBLIC PROCUREMENT

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Life Cycle Thinking

- Sustainability - strategy - changing consumption production patterns
- Sustainability literature – legal literature
- Life cycle thinking – no legal definition
- Still optional
  - common EU methodology - mandatory
Sustainability

Life cycle management systems and sustainable consumption and production

Programs and activities: design for environment, eco-labels, green procurement, recycling, design for sustainability, sustainable procurement, etc.

Life cycle approaches:
LCA, carbon and water footprint, material flow accounting, risk assessment, social LCA, life cycle costing, life cycle sustainability assessment

Data:
LCA data (including data for carbon and water footprint, exposure and hazard data, etc.)
LCT in the BUSINESS sector

• Internal drivers:
  – minimize the environmental impacts
  – improved product quality,
  – better image,
  – reduce costs,
  – employees’ interest and involvement,
  – new technological innovations.

• External drivers:
  – laws and regulations,
  – advantages in market competition,
  – frontrunner position
  – demands from business associations and networks,
  – collaboration among suppliers regarding environmental innovations
LCT in the public sector

- production standards and emission caps
- leading by example
- strategic decisions - adequate framework - green economy
- LCC – defense procurement 60s
- Limitations:
  - costs and resources
  - data availability
LCT tools: Life Cycle Assessment

• a holistic review
• a whole product or system
  – identify or quantify the energy and material inputs
  – evaluate the related environmental outputs,
  – appraise the corresponding impacts on the environment
Life Cycle Assessment in Procurement

• CA – decision-making and policy design
• Technological Alternatives – design of the PP
• Library - books, Schools - organic food
• Life cycle thinking instead of Life cycle Assessment
  – Lack of data for upstream and downstream impacts
• CA - LCA enabler, not doer
Life Cycle Costing in Procurement

• Economic appraisal. Project alternatives have to be compared:
  – fulfill the same performance requirements
  – differ on initial costs and operating costs

• Ordinary costs (material costs, labor costs, energy costs)
  – paid by the different parts in a business transaction

• External costs (pollution damage and health costs)
  – paid by external parties: individuals or society

• Difference business – public sector:
  – most costs – clear monetary value
  – not include the cost of externalities, except:
    • required through regulation
    • rewarded through a certification or label.
Life Cycle Costing in Procurement

• 2000s - green public procurement - policy
  – EU Sustainable Development Strategy (2001-2011),
  – 6th Environmental Action Programme (2002-2012),
  – Lisbon strategy and Europe 2020

• From ‘secondary considerations’ in 2004 PP Directives, to
  ‘horizontal policies’, ‘sustainable procurement’ or even
  ‘strategic procurement’ in 2014

• 2008 Energy Star Regulation
• 2009 Clean vehicles Directive
• 2010 Energy performance of Buildings Directive
Life Cycle Costing in Procurement

- Sector specific regulations
- Market consultations and procurement design
- Technical specs
- Labels
- Award criteria
- Monitoring and performance clauses
- Combination of tools
Sector specific regulations

- Recital 95 of the 2014/24/EU Directive
- Mandatory for private markets and public markets
Market consultation and procurement design

• LCC:
  – the value estimation based on a Life Cycle Costing calculation
  – identifying the different cost elements
  – assess different ideas put forward by the market
  – narrow down the different technological solutions envisaged

• LCA – only if available in the private market
Technical specifications

- Recital 74
  - tenders that reflect the diversity of technical solutions standards and technical specifications in the marketplace,
  - including those drawn up on the basis of performance criteria linked to the *life cycle* and the sustainability of the production process of the works, supplies and services
The use of labels

- Eco-labels - self-regulatory information instruments
- Eco-labels - voluntary tools for sustainable pp

Usage:

- **translating the environmental criteria** of the labels into technical specifications (only in cases when the market is mature and there are enough producers holding such labels);
- verifying **compliance** with technical specifications;
- **benchmark** offers at the award stage (market NOT mature enough, award stage - assign extra points for meeting additional environmental criteria that are preferred but are not compulsory elements of the bid);
- **single issue and performance labels** for a progressive approach
Award criteria

• MEAT
  – Lowest cost
  – Lowest price
  – Cost+ quality

• Recital 74 directive
  – Technical specs – award criteria – performance clauses
  – Life cycle of the supplies, services and works
Life Cycle Costing

- Article 68:
  - (i) costs relating to acquisition,
  - (ii) costs of use, such as consumption of energy and other resources,
  - (iii) maintenance costs,
  - (iv) end of life costs, such as collection and recycling costs

- This is Economic LCC

- All or part of costs – principle of equal treatment
Environmental LCC

Art.68: It also covers costs imputed to *environmental externalities* linked to the product, service or works during its life cycle,

- provided their monetary value can be determined and verified;
- such costs may include the cost of emissions of greenhouse gases and of other pollutant emissions and other climate change mitigation costs.

• Criteria:
  - objectively verifiable
  - non-discriminatory

• for repeated or continuous application / NO favoring or disadvantaging certain economic operators

• *accessible* to all interested parties

• *data required* - reasonable effort - normally diligent economic operators

• Life Cycle Costing and Emissions Tool
Products and Works vs. Services

• The life cycle of a product or work covers all stages from raw material acquisition until the final disposal.
  – production, transport and maintenance
• The life cycle of a service includes all stages from its preparation to the end of its provision.
  – direct monetary expenses
  – external environmental costs if they can be valued and verified
Social LCC

• Social criteria: labour conditions; equal opportunities; accessibility criteria

• Article 68 - social and employment criteria seem excluded from LCC

• Recital 96 of the Directive 2014/24/EU:
  – ‘the feasibility of establishing a common methodology on social life cycle costing should be examined, taking into account existing methodologies such as the Guidelines for Social Life Cycle Assessment of Products adopted within the framework of the United Nations Environment Programme’.
Social LCC

- Recital 97 of the Directive makes also reference to the social considerations in procurement:
  - “Furthermore, with a view to the better integration of social and environmental considerations in the procurement procedures, contracting authorities should be allowed to use award criteria or contract performance conditions relating to the works, supplies or services to be provided under the public contract in any respect and at any stage of their life cycles …..
  - (...) In accordance with the case-law of the Court of Justice of the European Union, this also includes award criteria or contract performance conditions relating to the supply or utilisation of fair trade products in the course of the performance of the contract to be awarded. Criteria and conditions relating to trading and its conditions can for instance refer to the fact that the product concerned is of fair trade origin, including the requirement to pay a minimum price and price premium to producers.
  - However, the condition of a link with the subject-matter of the contract excludes criteria and conditions relating to general corporate policy, which cannot be considered as a factor characterising the specific process of production or provision of the purchased works, supplies or services. Contracting authorities should hence not be allowed to require tenderers to have a certain corporate social or environmental responsibility policy in place.
Social LCC

• Examples:
  – unemployment benefits the payment of which would have been necessary without the procurement of a given asset,
  – health care costs that would have been necessary if environmentally preferable alternatives would not have been procured
  – the life cycle of a product can be broken down into labor units (hours) and calculate the income per unit; that income can then be used to approximate the well-being of people in different regions, considered to be including such basic needs as food and housing

• Challenging to forecast

• Alternative: LABELS
  – fair trade labels
  – Fair Wear Foundation
  – SA8000: Standard for Social Accountability
Methodologies

- The Clean Vehicles Directive and the Regulation on office equipment - the only methodologies mandatory in the EU
- The market should provide the rest of the methodologies, and it is providing some of them, although they are not identified in the Directive
- The sector specific regulations or directives are expected to further provide such methodologies.
- Member states – (optional) mandatory methodologies
- Contracting authorities
  - existing methodologies developed by the market or by other governments;
  - they may be used as such or adapted to the needs of the contracting authority
  - indicate in the procurement documents the data to be provided by the tenderers and the method which the contracting authority will use to determine the life-cycle costs on the basis of this data.
Methods

• Methods used for the assessment of costs - based on objectively verifiable and non-discriminatory criteria.
  – Principle of non discrimination
  – Principle of transparency
  • the method should be accessible to all interested parties,
  • data required by contracting authorities for calculating LCC should be provided with reasonable effort by normally diligent economic operators.
Methodologies?

• For certain contracts, an off-the-shelf LCC methodology which adequately captures all internal and external costs may not be available (either at EU or another level).

• Contracting authorities can modify an existing methodology,
  – Except when it was adopted at EU level. National level?

• EU-wide methodologies
  – May prevent fragmentation
  – Offer greater legal certainty to contracting authorities
  – Success depends very much on the quality and comprehensiveness.

• Tailor made methodologies? Alternative methodologies supplied by tenderers? Equal treatment?

• Template methodologies for LCC in different fields + ‘nudging’ Member States into providing quotas of procedures using LCC?
Monitoring /performance clauses

• The supplier agrees to not exceed the lifecycle costs estimations of the contract.
• Penalties
• Improvements evaluated and communicated
• Cost history for future reference
• Implications for state aid law
Combination of tools

- A Combination of tools - the life cycle thinking?
- Hard to monetize – just use the Labels
- Reluctance at contracting authority level
- LCC may be the pivotal element of the reform
- The power of classical control authorities – the Court of Audits – risk assessment
- LCC may mean *paying more in the beginning*:
  - In developing countries - through expensive imports / paying a very high cost premium to stimulate infant local industries
  - In lower income economies, this difference can be higher, as much as 10 to 50 percent
  - Large volumes - economies of scale more feasible
  - CA - strong market positioning to negotiate bulk discounts as the market begins to mature.
Selected feasibility of LCC:

• HIGH:
  – supplies such as office and server ICT equipment, vehicles, indoor and outdoor lighting, fuel and furniture,
  – services such as electricity, transport, waste handling, catering beverages
  – works such as construction of new buildings or refurbishment of existing buildings, railways, roads.

• MODERATE paper and food catering, couriers and postal services, as well as landscaping.

• NO: office supplies and software
LCC usage (LCC SoA Report 2017)

• LCC usage in the world:
  – the majority of procurers use LCC sometimes and only for some products, or rarely.
  – Only 2% are using LCC in all cases

• In the EU:
  – most commonly used award criterion was still the purchasing cost (64%),
  – a mix of the latter and LCC or TCO (30%);
  – A predominant use of LCC/TCO (6%).
  – Portugal and Romania, very limited
  – Ireland - most widespread – still only 25%
Final considerations

• Einstein: “not everything that can be counted counts and not everything that counts can be counted”.
• Many opportunities to include sustainability considerations in procurement processes, areas of legal uncertainty remain.
• Environmental LCC vs. Social LCC 1-0 ?