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## POLICY PAPER

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# PRODUCTION OF CONSTRUCTION MATERIALS AND PERSONAL PROTECTIVE EQUIPMENT IN GEORGIA: CHALLENGES AND RECOMMENDATIONS

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This publication was prepared within the  
USAID Economic Security Program

2023

# CONTENTS

PREFACE .....	1
METHODOLOGY .....	3
<b>1. OVERVIEW OF THE VALUE CHAINS .....</b>	<b>5</b>
1.1. LEGAL AND REGULATORY FRAMEWORK .....	5
1.1.1. CONSTRUCTION MATERIALS .....	5
1.1.2. PERSONAL PROTECTIVE EQUIPMENT (PPE) .....	5
1.2. INSTITUTIONAL SETUP .....	7
1.3. OVERVIEW OF ECONOMIC TRENDS.....	7
1.3.1. OVERVIEW OF THE MAIN ECONOMIC INDICATORS IN THE PRODUCTION OF CONSTRUCTION MATERIALS.....	8
1.3.2. OVERVIEW OF THE MAIN ECONOMIC INDICATORS FOR THE PRODUCTION OF PPE .....	14
1.3.3. GLOBAL TRENDS IN THE PRODUCTION OF MEDICAL PPE .....	19
<b>2. POLICY CHALLENGES .....</b>	<b>21</b>
2.1. CONSTRUCTION MATERIALS .....	21
2.1.1. CHALLENGES RELATED TO PUBLIC PROCUREMENT.....	21
2.1.2. CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION .....	21
2.1.3. LACK OF INNOVATION AND INNOVATIVE SKILLS.....	22
2.1.4. BARRIERS TO ENTERING GLOBAL EXPORT MARKETS.....	22
2.1.5. LOW AVAILABILITY OF SKILLED LABOR.....	23
2.1.6. INEFFICIENT MANAGEMENT OF CONSTRUCTION WASTE .....	24
2.1.7. CHALLENGES RELATED TO BUSINESS DISPUTES .....	24
2.2. PERSONAL PROTECTIVE EQUIPMENT (PPE) .....	24
2.2.1. LOW AVAILABILITY OF SKILLED LABOR.....	24
2.2.2. LIMITED ACCESS TO FINANCE.....	25
2.2.3. CHALLENGES RELATED TO PUBLIC PROCUREMENT .....	26
2.2.4. LIMITED ACCESS TO LOCAL ACCREDITED LABORATORIES.....	26
2.2.5. INSUFFICIENT LEVEL OF PUBLIC-PRIVATE DIALOGUE .....	26
2.2.6. DEPENDENCE ON IMPORTED RAW MATERIALS .....	27
2.2.7. LACK OF INNOVATIONS AND INNOVATIVE SKILLS IN THE PRIVATE SECTOR .....	27
<b>3. PRIORITY CHALLENGES.....</b>	<b>28</b>
3.1. PRIORITY CHALLENGE I: CHALLENGES RELATED TO PUBLIC PROCUREMENT .....	29
3.2. PRIORITY CHALLENGE II: CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION .....	32

<b>4. CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>33</b>
4.1. CHALLENGES RELATED TO PUBLIC PROCUREMENT .....	33
4.2. CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION....	39
<b>5. FOLLOW-UP OF PUBLIC-PRIVATE DIALOGUE AND ACTIVITIES RELATED TO RECOMMENDATIONS.....</b>	<b>42</b>
5.1. CHALLENGES RELATED TO PUBLIC PROCUREMENT .....	42
5.2. CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION....	43
<b>6. ANNEXES .....</b>	<b>45</b>
ANNEX 1. LIST OF CONDUCTED INTERVIEWS .....	45
ANNEX 2: WORKING GROUP PARTICIPANTS .....	47
ANNEX 3: ECONOMIC ACTIVITY CLASSIFIER (NACE REV.2) CODES FOR THE CONSTRUCTION MATERIALS VALUE CHAIN .....	48
APPENDIX 4: RESULTS OF AN ANONYMOUS SURVEY CONDUCTED WITH THE WORKING GROUP .....	49
<b>BIBLIOGRAPHY .....</b>	<b>50</b>

## PREFACE

This policy paper was prepared by Policy and Management Consulting Group (PMCG)<sup>1</sup> within the frame of the USAID Economic Security Program, in conjunction with the Sector Economy and Economic Policy Committee of the Parliament of Georgia, and with active involvement of the Georgian Construction Materials Cluster, the latter supported under the Clusters4Development Project funded by the European Union and the German Government. The goal of the Program is to accelerate broad-based growth of Georgia's economy in sectors that show strong potential to create jobs, to increase incomes, to increase micro, small, and medium enterprise (MSME) revenues, and increase investment. Apart from supporting diversification to more productive economic activities, the Program helps to improve eco-system for the priority sectors and value chains such as solid waste management, light manufacturing, tourism, creative industries, and shared intellectual services. In fulfilling its purpose, the Program also focuses on skills development of the workforce, strengthening of institutions that support these sectors, and establishment of partnerships that catalyse investment within the priority growth areas.

The present study analyzes two value chains<sup>2</sup> in the light manufacturing sector namely PPE<sup>3</sup> and construction materials, and aims at studying existing difficulties, as well as developing recommendations for addressing the most important challenges for these value chains by facilitating inclusive dialogue and participatory processes. Recent developments including the COVID-19 pandemic and the growth of the construction sector have significantly increased the potential of the PPE and construction materials value chains on both local and export markets. However, there are still a number of hindrances holding them back and these require comprehensive evaluation and the devising of practical solutions.

The goal of the project entitled “Developing Policy Documents in Priority Sectors and Facilitating Public-Private Dialogue” is to identify ways to overcome the revealed challenges through effective intersectoral dialogue and to plan and implement specific measures accordingly.

To achieve this goal, it is very important that all of the main stakeholders are informed about existing challenges as well as the need to actively tackle them through public-private dialogue and to arrive at effective solutions. Accordingly, the methodology of this study was based on the involvement of a wide range of stakeholders at all stages of the project. The main mechanisms deployed to organize public-private dialogue included cooperation with the Sector Economy and Economic Policy Committee of the Parliament of Georgia and the multi-sectoral working groups created at the initial stage of the project. With the support of the USAID Economic Security Program and the Committee, the working groups identified priority challenges and, following a discussion, outlined the best ways to address these challenges while also assessing their potential impact.

The present policy brief is also based on the findings of the quarterly sector and value chain analytical reports developed by PMC Research Center (PMC RC) and International School of Economics at TSU (ISET) in 2020-2022 under the USAID Economic Security Program for the mentioned priority sectors.<sup>4</sup> The

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<sup>1</sup> For the purpose of the present study, PMCG as a contractor, including PMC Research Center (PMC RC), represents the USAID Economic Security Program.

<sup>2</sup> For the purposes of the USAID Economic Security Program, value chains of furniture, packaging, and wooden toys are also being considered in the light manufacturing sector.

<sup>3</sup> PPE - Personal Protective Equipment

<sup>4</sup> The sector and value chain analytical reports are available at: <https://pmcg-i.com/publication-category/reports/>

analytical reports provide an analysis of trends and denote the opinions of stakeholders regarding the challenges and opportunities present in each value chain.

The challenges facing both value chains discussed in this study are largely similar. In particular, according to stakeholders representing both the PPE and construction materials value chains, the main obstacle they face is the lack of access to finances, which limits the ability of companies to develop technologies and expand their production processes. Both value chains are among the priority directions of the state support program "Enterprise Georgia" which has helped some companies to implement several projects successfully.

Other challenges facing both value chains include a lack of skilled labor, a shortage of specialized testing laboratories, and a dependence on imported raw materials. The latter was exacerbated by the outbreak of the COVID-19 pandemic when imports from the main importing countries (China and Turkey) were halted, significantly affecting the functioning of these value chains.

This policy brief consists of the following parts:

- **METHODOLOGY** - Describes the main stages of the study and provides an overview and summary of the public-private dialogue process and its results.
- **OVERVIEW OF THE VALUE CHAINS** - Provides an overview of the main trends in the development of the PPE and construction materials value chains, as well as the legal and regulatory framework and institutional setup, the main economic indicators, and the challenges identified at the initial stage of the study.
- **PRIORITY CHALLENGES** - Provides a detailed analysis of the priority challenges identified by the working groups, their causes, and their impact on the development of the value chains.
- **CONCLUSIONS AND RECOMMENDATIONS** - Summarizes the findings of the study and proposes recommendations to address the priority challenges, taking into account international best practices.

## METHODOLOGY

The main goal of this policy brief is to inform target groups about the need to address the identified challenges, which, in turn, is essential to ensure their informed and effective engagement. Accordingly, its development relied on the active participation of interested parties at all stages of the study and dialogue processes.

The methodology of the policy brief included the following main stages:

**I. IDENTIFICATION OF CHALLENGES IN THE VALUE CHAINS:** At the initial stage of the study, the PMCG team carried out desk research, individual in-depth interviews, and focus group discussions with around 40 stakeholders, including representatives of both private and public sectors, non-governmental and donor organizations, as well as relevant experts to explore the current situation and pressing challenges in the PPE and construction materials value chains (Annex 1). In particular, the interviews and the desk research revealed a wide range of problems in the value chains.

**II. SELECTION OF PRIORITY CHALLENGES:** During the next stage of the study, thematic multi-sectoral working groups composed of relevant stakeholders were formed<sup>5</sup> (Annex 2). The members of the working groups reviewed and discussed the five main challenges identified in each value chain at the first stage of the study in the format of a virtual public-private dialogue. Following this, members of the working groups were presented with a list of challenges and asked to select the two they considered most significant for the development of each value chain from both short- and long-term perspectives. In this process, members of the working groups assigned scores from 1 to 5 for the identified challenges using an electronic questionnaire, where "1" meant the challenge was of lowest priority, and "5" meant it was of the highest, for the criteria listed below:

- Economic effect
- Political feasibility
- Administrative feasibility
- Technical feasibility and
- Time needed to solve the problem.

**III. DEVELOPMENT OF THE POLICY BRIEF:** At this stage, the PMCG team members developed the policy brief itself, including an overview of the given problems and viable solutions thereto, as well as the potential impact these proposed solutions on the development of the PPE and value chains. A draft version of the policy paper was then presented to the working groups for its consideration, as part of the second virtual meeting. After taking into consideration the opinions and comments of the working groups members, the final version of the policy brief was developed.

**IV. WIDE PUBLIC-PRIVATE DIALOGUE:** The USAID Economic Security Program and the Sector Economy and Economic Policy Committee of the Parliament of Georgia organized a broad dialogue between the public and private sectors to discuss the results of the study and to make improvements to the proposed recommendations.<sup>6</sup> Legislators, industry experts, representatives of the government of Georgia, the private

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<sup>5</sup> The working groups were composed of the respondents from the interviews conducted in the first stage of the research.

<sup>6</sup> For more information on the large-scale public-private dialogue session, see the link below:  
<https://parliament.ge/en/media/news/dargobrivi-ekonomikisa-da-ekonomikuri-politikis-komitetshi-sajaro-da-kerdzo-sektorebs-shoris-dialogi-gaimarta>

sector, academic and research organizations, as well as local non-governmental and international organizations, participated in the dialogue session. All organizations and industry representatives interested in the mentioned issue had the opportunity to follow the public-private dialogue session and express their positions through the online platform. The event was also broadcast live on the Facebook pages of the Parliament of Georgia and the USAID Economic Security Program. The results of the dialogue are reflected in this paper.

# 1. OVERVIEW OF THE VALUE CHAINS

## 1.1. LEGAL AND REGULATORY FRAMEWORK

### 1.1.1. CONSTRUCTION MATERIALS

When reviewing the legislative framework for the construction materials value chain, as well as for the PPE value chain, it is pertinent to take into account the Product Safety and Free Movement Code<sup>7</sup>, the main purpose of which is to ensure that products placed on the market are safe and afforded free movement, as well as to introduce best practices in the areas of standardization, metrology, accreditation, and conformity assessment, as well as harmonization with relevant EU legislation.

The Technical Regulations on Construction Materials, enacted on the basis of Resolution No. 476 of the Government of Georgia on October 1, 2018<sup>8</sup>, represents a very important document concerning the operations of the construction materials value chain. Since then, the resolution has been amended several times (at the time of writing, the last amendment had been made on December 18, 2020).

The purpose of the Technical Regulations on Construction Materials is to ensure that products placed on the market meet EU standards, as well as to guarantee fair and equal trade conditions for operators carrying out similar economic activities within the value chain. The Regulations establish specific conditions for the placement of products on the market, defining the rules for determining the main properties of construction materials, as well as their declarations and marking thereof. The Regulations apply to the following five main products: cement, rebar, plasterboard, electric cables, and plastic pipes (CNFEA: 2523, 7214, 8544, and 3917, accordingly).

Resolution No. 476 also establishes the basic principles for declaring and marking essential characteristics of construction materials by relevant economic operators and rules for marking. The obligations specified for operators are applicable to manufacturers and importers, as well as to distributors and authorized representatives.

The Resolution also defines conformity assessment procedures during production; the rights and obligations of relevant economic operators when placing products on the market; obligations to monitor the product and implement necessary corrective measures; and state market surveillance and security measures.

### 1.1.2. PERSONAL PROTECTIVE EQUIPMENT (PPE)

When reviewing the legal framework for products in this category, it is first necessary to define personal protective equipment (PPE), and to list the relevant products, consistent with Georgian legislation. According to Resolution No. 82 of the Government of Georgia dated February 6, 2020, on Approval of Technical Regulation on Personal Protective Equipment, the term PPE means:

- equipment designed and manufactured to be worn or held by a person for protection against one or more risks to that person's health or safety;
- interchangeable components for equipment which are essential for its protective function; and

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<sup>7</sup> <https://matsne.gov.ge/ka/document/download/1659419/34/ge/pdf>

<sup>8</sup> <https://matsne.gov.ge/ka/document/view/4336673?publication=0>



- connection systems for personal protective equipment that are not held or worn by a person, that are designed to connect that equipment to an external device or to a reliable anchorage point, that are not designed to be permanently fixed and that do not require fastening works before use.

Annex I of this Technical Regulation lays down the categories of risk against which PPE is intended to protect users, as follows:

Category I - superficial mechanical injury; contact with cleaning materials of non-dangerous chemical content; contact with hot surfaces not exceeding 50°C; and damage to the eyes due to exposure to sunlight, etc.;

Category II - risks other than those listed in Categories I and III; and

Category III - includes the risks that may cause very serious consequences such as death or irreversible damage to health.

Resolution No. 318 of the Government of Georgia amending Resolution No. 82 of the Government of Georgia dated February 6, 2020, on Approval of Technical Regulation on Personal Protective Equipment specifies lists of products subject to prior notification during import. List #1 of PPE includes the following categories:

- respirators
- eye and face protection
- ear safety equipment
- equipment protecting against falls from a height
- protective helmets
- protective clothing
- protective footwear
- protective gloves
- safety equipment for sports and
- other: mountaineering gear.

The relevant categories, product names, and product codes from List #2 are provided in Annexes X and XI to the Resolution No. 318 of the Government of Georgia<sup>9</sup>.

In addition, the Technical Regulation sets the requirements for the design and manufacturing of PPE available on the market to ensure the health and safety of consumers. It also specifies the obligations of producers, authorized representatives, importers, and distributors of PPE when placing the products on the market.

According to the Technical Regulation, the market surveillance body (Market Surveillance Agency) is authorized to examine the compliance of PPE placed on the domestic market and to develop appropriate recommendations to ensure their conformity with the requirements specified in the Technical Regulation. In addition, the Resolution obliges relevant economic operators to cooperate with the market surveillance body in the implementation of necessary measures, as well as to provide information and documents required to determine the conformity of the product.

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<sup>9</sup> <https://matsne.gov.ge/ka/document/view/5206494?publication=0>

## 1.2. INSTITUTIONAL SETUP

The institutional setup related to the construction materials and PPE value chains is determined mainly by the Ministry of Economy and Sustainable Development of Georgia (MoESD), as well as its departments and agencies including the Economic Policy Department, the Market Surveillance Agency, the Construction Policy Department, the Technical and Construction Supervision Agency, the Georgian National Agency for Standards and Metrology, the Georgian Accreditation Center, and Enterprise Georgia.

The Economic Policy Department, *inter alia*, participates in the development of economic policies of sectors and the country as a whole. It is responsible for managing and coordinating policy planning processes, and monitors and evaluates policy implementation with the involvement of relevant stakeholders. The tasks of the Department include the development of small and medium entrepreneurship and improvement of the business environment in general, as well as facilitation and promotion of dialogue between public and private sectors.

The Market Surveillance Agency, which is a legal entity of public law (LEPL) under the MoESD, is responsible for the safety of products placed on the market of Georgia, as well as for the surveillance of products that do not comply with the requirements of the Code of Free Movement and relevant technical regulations, and the protection of human life, health, assets, and the environment by restricting the availability of such products on the market. The list of products includes industrial and construction materials, as well as consumer products (including PPE).

The Construction Policy Department under the MoESD, consisting of the two main structural units - the Division of Construction Affairs and the Division of Legal Regulation of Construction Activities, is indirectly related to the construction materials value chain. One of the main tasks of the Department is to work on the legislation regulating construction activities, including the Code on Spatial Planning, Architectural and Construction Activities of Georgia and its by-laws, as well as on the transition away from outdated construction standards and norms still in force in Georgia to Eurocodes. However, the Department is not involved in the development of national annexes to Eurocodes. Instead, these annexes are to be developed by the Georgian National Agency for Standards and Metrology through its Special Construction Committee with the involvement of practitioners and researchers. Decisions on the development of national parameters will be made jointly.

Enterprise Georgia, which helps to improve the business environment in the country, promotes exports, increases investment attractiveness, and cooperates with entities producing construction materials more intensively than with manufacturers of PPE. The production of construction materials was one of the first priority directions set by Enterprise Georgia. To date, of the projects supported by this agency, the construction materials production value chain, along with the hospitality sector and the production of packaging materials, have the most beneficiaries.

## 1.3. OVERVIEW OF ECONOMIC TRENDS

This subsection has been prepared based on the quarterly analytical reports of priority sectors developed under the USAID Economic Security Program. It contains a review of the key economic indicators (KPIs) for the PPE and construction materials value chains.

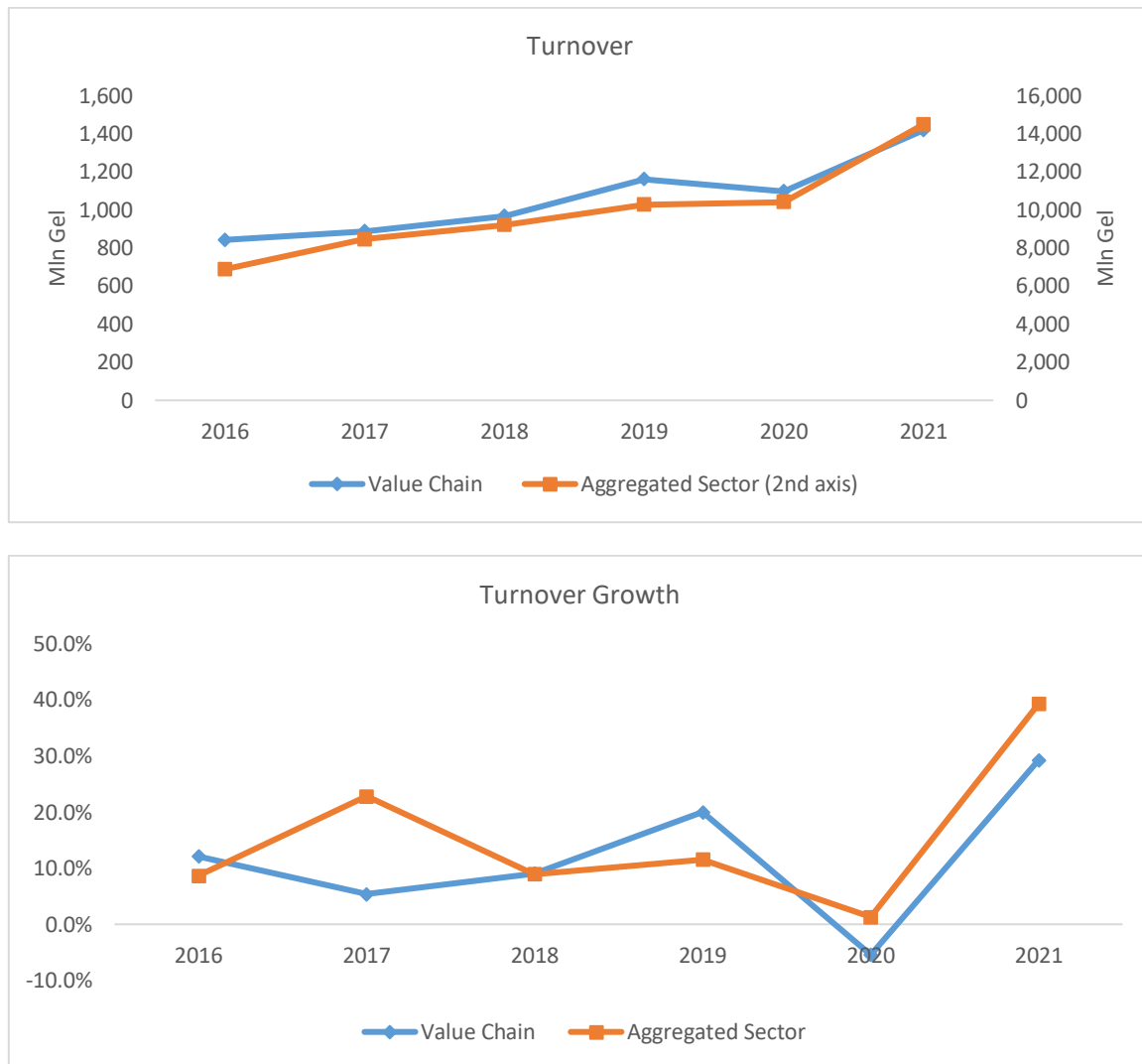
Data on construction materials, turnover of enterprises, growth of turnover, and employment are all based on the data from the GeoStat (Annex 3 - Codes of the Economic Activity Classifier (NACE rev.2) for the construction materials value chain). Due to the unavailability of official statistical data on PPE, data

collection to accommodate the indicators listed above was carried out through a telephone survey<sup>10</sup>. The trade information for both value chains is based on data from the GeoStat and the UN Trade Portal.

### 1.3.1. OVERVIEW OF THE MAIN ECONOMIC INDICATORS IN THE PRODUCTION OF CONSTRUCTION MATERIALS

In 2016-2019, the turnover of the construction materials value chain grew steadily, after which it decreased slightly (by 5.4%) compared to 2019. In 2021, as the economy began to recover, it increased by 29.2% and reached GEL 1.4 billion.

**Chart 1:** Turnover and growth rate of turnover for the construction materials value chain and the corresponding aggregated sector<sup>11</sup>, 2016-2021.



Source: GeoStat

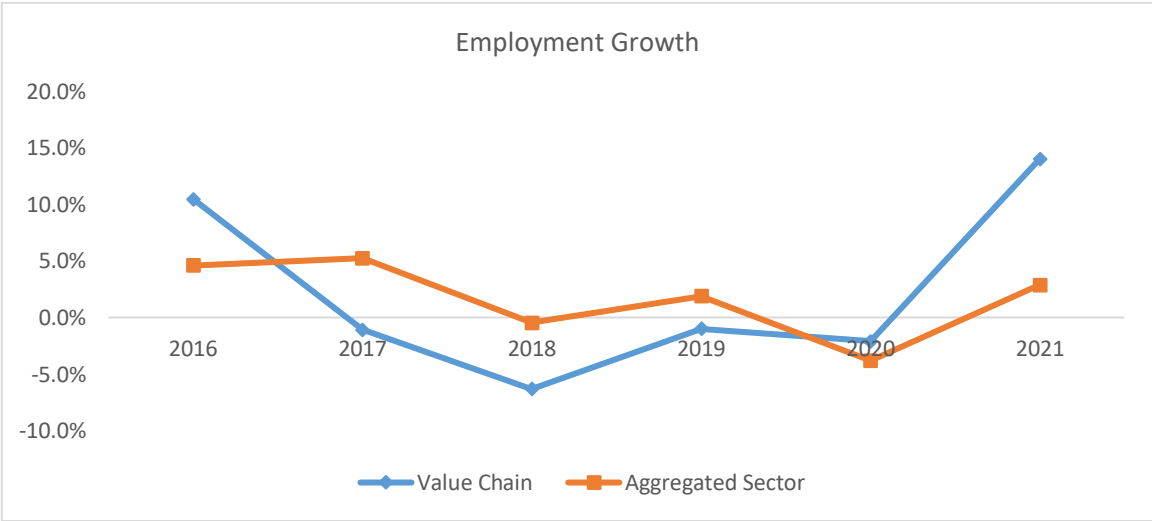
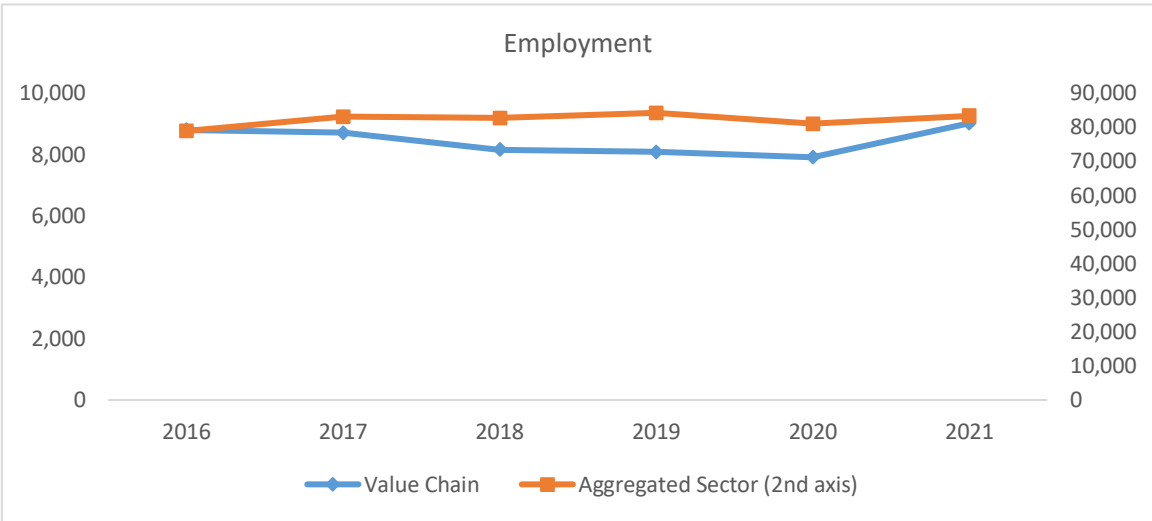
<sup>10</sup> The sample of respondents constituted 32 businesses involved in the production of PPE, registered under the NACE 14.12 (manufacture of workwear) and NACE 32.99 (other manufacturing) codes. The absolute majority of the businesses surveyed were limited liability companies located in Tbilisi, Imereti, and Adjara (Batumi). These companies produce different types of work uniform (for industry workers, hotel personnel, law enforcement agencies, etc.) protective face masks, and other medical safety equipment.

<sup>11</sup> Processing industry.

Unlike turnover, the number of employees in the construction materials value chain before the pandemic was decreasing every year, however from 2020 to 2021 it increased significantly (by 14%), reaching 9,012 in total. Until 2020, the employment growth observed in the aggregated sector differed, where there had been employment growth every year before the pandemic struck.

After a recession in 2020, employment in the aggregated sector increased again, in 2021 albeit slightly (by 2.9%).

**Chart 2:** Number of employees and the employment growth rate in the construction materials value chain and the corresponding aggregated sector, 2016-2021.



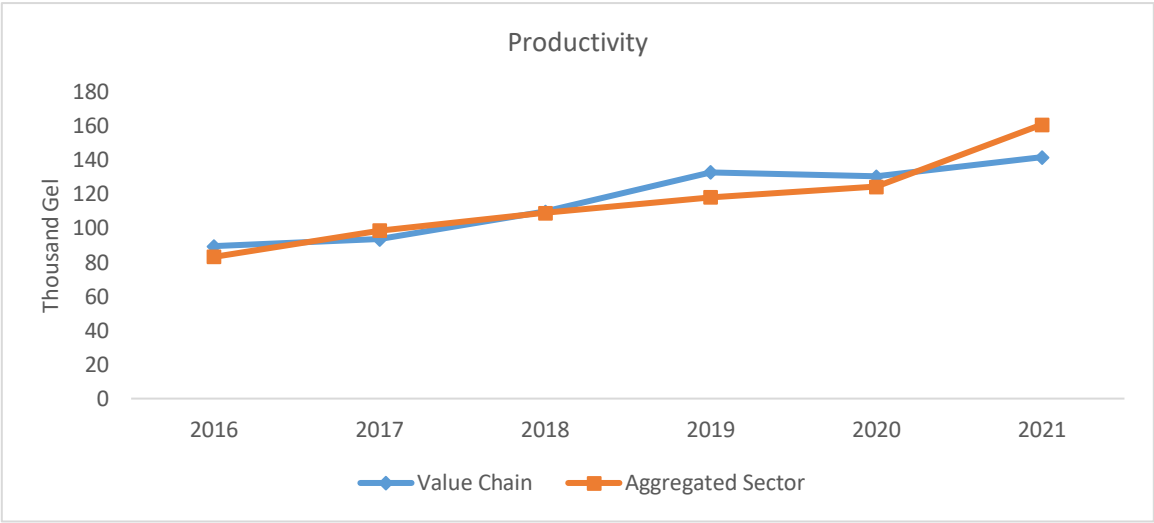
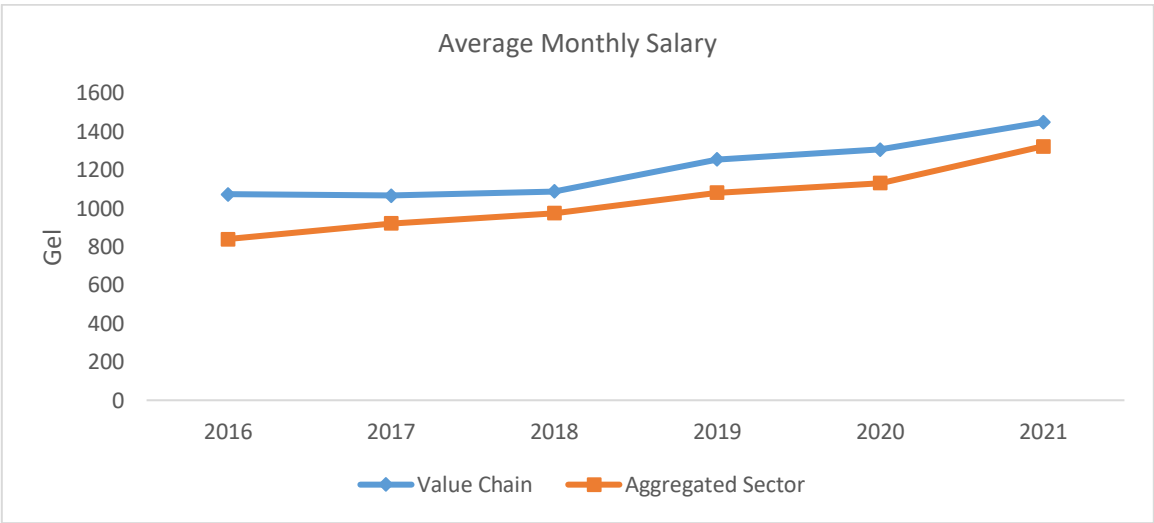
Source: GeoStat

The average monthly salary in the construction materials value chain exceeds the average of the aggregated sector, and has been increasing in recent years. It should be noted that the average monthly salary has not decreased even during the pandemic, and in 2021 it even increased by 11% compared to 2020 and amounted to GEL 1.440<sup>12</sup>. As for productivity, after a slight decrease in 2020, the productivity increased

<sup>12</sup> Ratio of total output to total number of employees.

again by 8.7% and reached GEL 141,527 in 2021. A greater increase was observed in the aggregated sector (29.2%), which had been almost equal to that of the construction materials value chain until 2020.

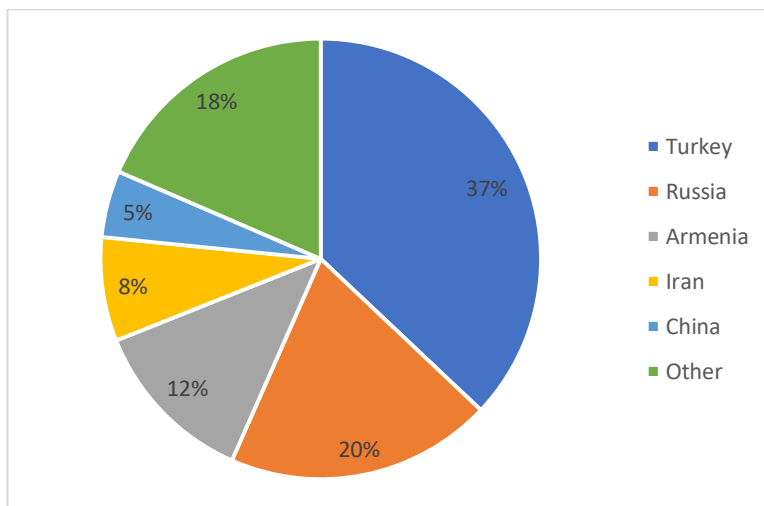
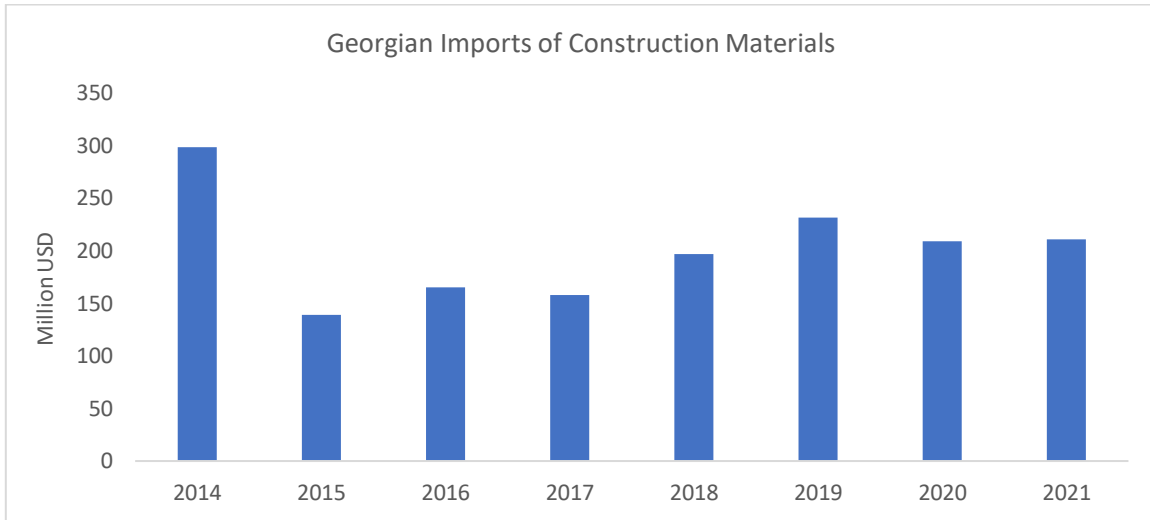
**Chart 3:** Average monthly salary and productivity in the construction materials value chain and the corresponding aggregated sector, 2016-2021.



Source: GeoStat

Imports of construction materials, characterized by year-on-year increases before the pandemic, decreased in 2020, and then grew slightly in 2021 by only 0.8% reaching USD 211 million. In 2021, Georgia imported construction materials mainly from Turkiye (37%), Russia (20%), Armenia (12%), Iran (8%), and China (5%).

**Chart 4:** Imports of construction materials in 2014-2021 and main importing countries in 2021

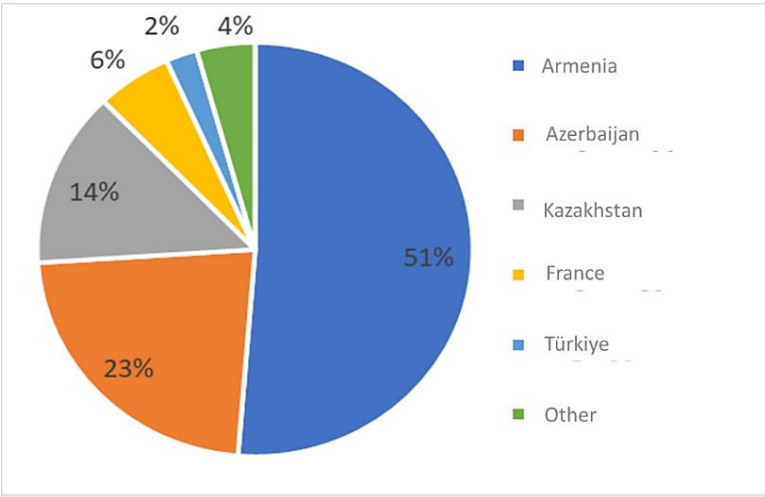


Source: GeoStat

Georgia's exports of construction materials, like imports, declined in 2020 compared to 2019, but significantly increased (by 65.3%) in 2021 coinciding with a partial recovery of the Georgian economy, amounting to USD 2.9 million. During the last four years, a downward trend in re-exports of construction materials from Georgia prevailed and in 2021 re-exports decreased by 8.6% compared to the previous year, reaching USD 5.4 million.

In 2021, the main countries to which Georgia exported (and re-exported) construction materials were Armenia (51%), Azerbaijan (23%), Kazakhstan (14%), France (6%), and Turkiye (2%).

**Chart 5:** Exports and re-exports of construction materials in 2014-2021 and main destination countries in 2021

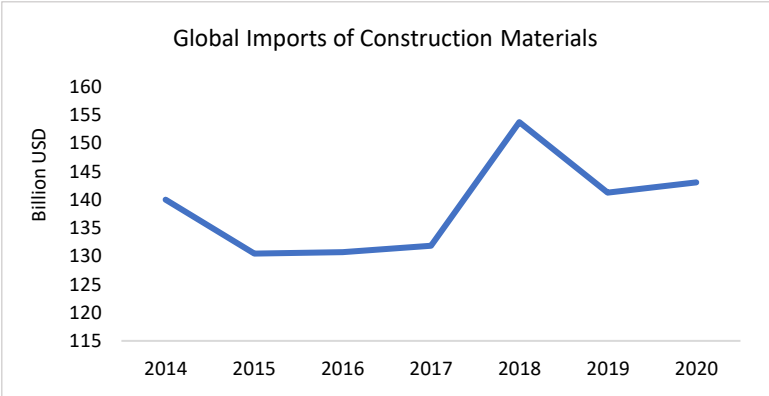


Source: GeoStat

The recent global dynamics of trade in construction materials are shown in Charts 6 and 7. After peaking in 2018, global imports of construction materials decreased significantly in 2019 before growing in 2020, despite the outbreak of the pandemic and corresponding crisis<sup>13</sup>.

<sup>13</sup> Data for 2021 were not available at the time of writing.

**Chart 6:** Global imports of construction materials, 2014-2020.



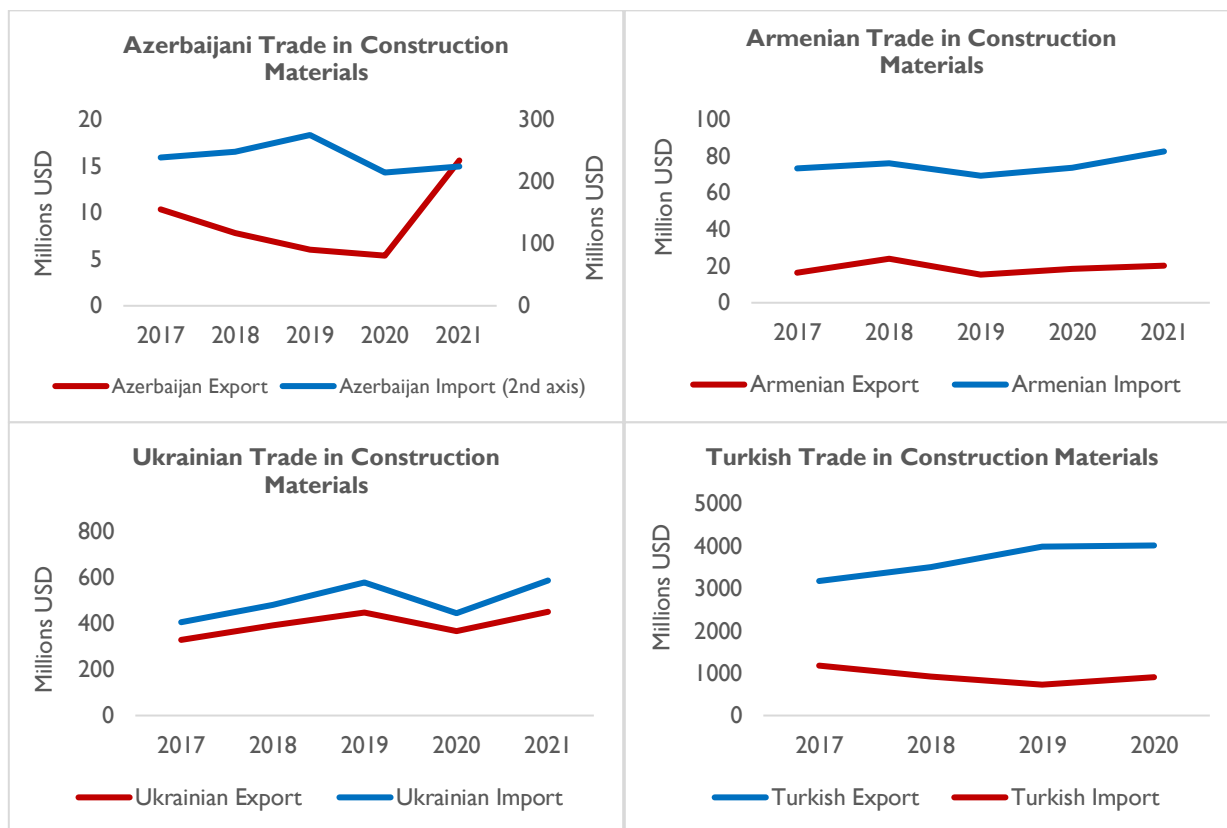
Source: UN Comtrade

Chart 7 shows the data on trade in construction materials for four countries bordering or near Georgia in 2017-2021. Until 2021, the export of construction materials from Azerbaijan was characterized by a steadily decreasing trend, while in 2021 sharp growth was observed when exports increased almost threefold compared to the previous year. This coincided with a decline in exports of construction materials from Ukraine, albeit this recovered in 2021 to almost match the rates of 2019.

Imports of construction materials to Ukraine were characterized by similar trends over the same period. Meanwhile, the pandemic reversed the previously upward trend in imports for Azerbaijan, even though a slight improvement was observed in 2021 (in general, imports had been growing to both countries until 2020). Elsewhere, before the pandemic, the imports of construction materials into Turkiye were characterized by a downward trend, but in 2020, for the first time in the last four years, an increase was observed, while exports of construction materials from Turkiye demonstrated an opposite and mirroring trend. As for Armenia, the indicators for imports and exports were characterized by similar trends - downward before the pandemic struck, and upward in 2021. In addition, from 2020 to 2021, growth in exports resumed for both Azerbaijan and Ukraine. In general, the volume of imports in 2021 grew in all four countries compared to the previous year.



**Chart 7:** Regional trade in construction materials.

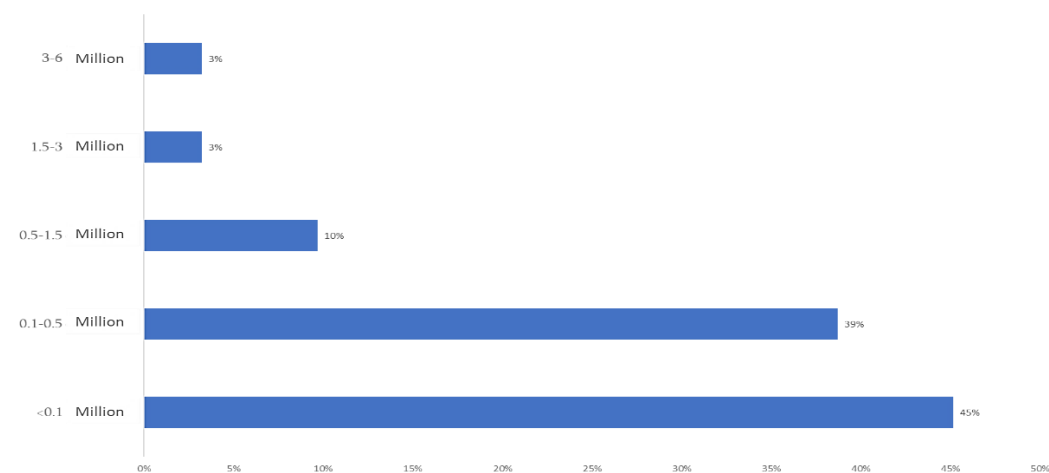


Source: UN Comtrade

### 1.3.2. OVERVIEW OF THE MAIN ECONOMIC INDICATORS FOR THE PRODUCTION OF PPE

The PPE value chain consists mainly of small businesses. The average quarterly turnover of 45% of the surveyed companies in 2021 was less than GEL 0.1 million, while 39% of the surveyed companies had a turnover between GEL 0.1-0.5 million, and 10 % were within GEL 0.5-1.5 million, and only 6% of the surveyed companies had a quarterly turnover within GEL 0.5 million and GEL 6 million (Chart 8).

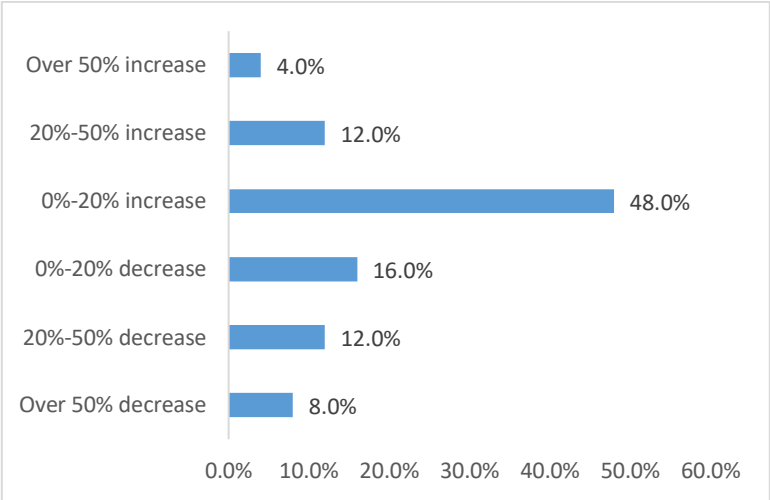
**Chart 8:** Distribution of PPE companies by average quarterly turnover range, 2021.



Source: Authors' own calculations, USAID 2022.

As for the average quarter-on-quarter increase in turnover growth in 2021 compared to 2020, for the majority of surveyed companies (48%) this ranged between 0% and 20%. Meanwhile, for 16% of the surveyed companies, their turnover in 2021 increased by more than 20% on average, compared to the previous year, and the remaining 36% reported that their average quarter-on-quarter turnover in 2021 decreased, compared to 2020 (Chart 9).

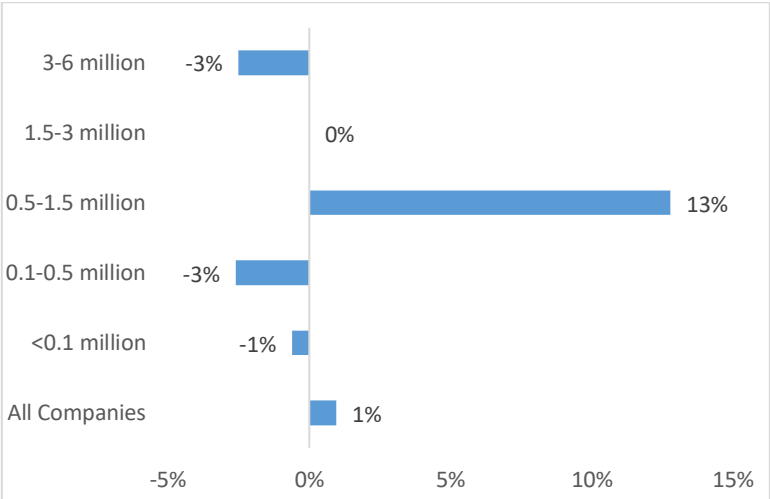
**Chart 9:** Percentage distribution of turnover growth rates in the PPE value chain, 2021.



Source: Authors' own calculations, USAID 2022.

Chart 10 shows the distribution of growth rates of the surveyed companies (in 2021, compared to 2020) according to the range of average quarterly turnover. The turnover of the surveyed companies increased by an average of 1% from 2020 to 2021. However, the large companies (quarterly turnover GEL 3-6 million) surveyed experienced a YoY turnover decline of 3% on average. In medium-sized companies, with GEL 0.5-1.5 million turnover, a significant positive trend was observed - their turnover increased by an average of 13% from 2020 to 2021. Meanwhile, for companies whose quarterly turnover is in the range of GEL 0.1-0.5 million it decreased by 3% and for those with quarterly turnover of less than GEL 0.1 million, it decreased by 1%.

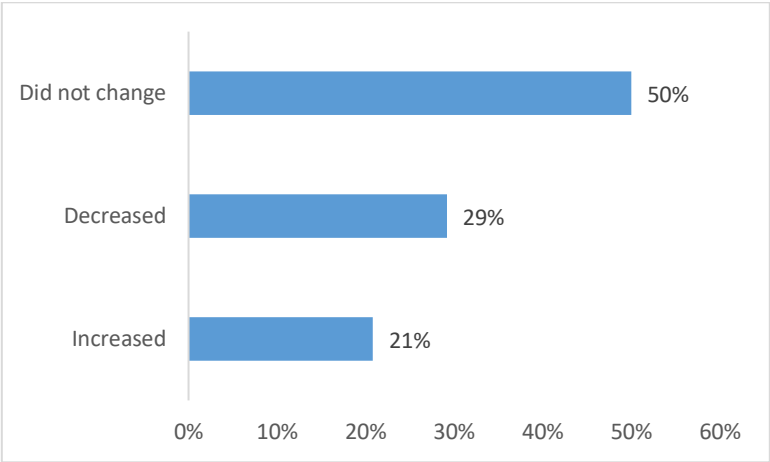
**Chart 10:** Distribution of PPE companies' growth rates by average quarterly turnover range, 2021.



Source: Authors' own calculations, USAID 2022.

In 2021 the average quarterly number of hired employees in the surveyed companies ranged from 1 to 150<sup>14</sup>. The share of women among employees in the PPE value chain is high as according to the averaged data for 2021, women constituted 79% of employees. As for young people (those aged under 30), their share is low, making up 7% of the total number of employees in the surveyed companies. It should also be noted that half of the surveyed companies (50%) indicated no change or increase (21%) in their number of employees in 2021 compared to 2020, and only 29% of surveyed companies reported a decrease in their number of employees (Chart 11). As for salaries, the average quarterly salary in surveyed companies in 2021 was GEL 737.

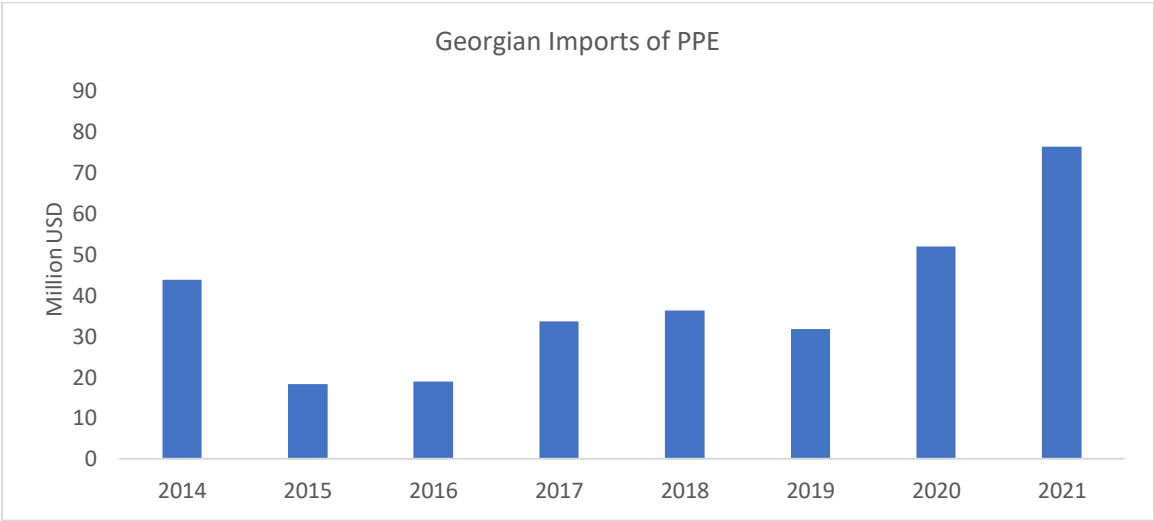
**Chart 11:** Average quarter-on-quarter change in number of hired employees, 2021.



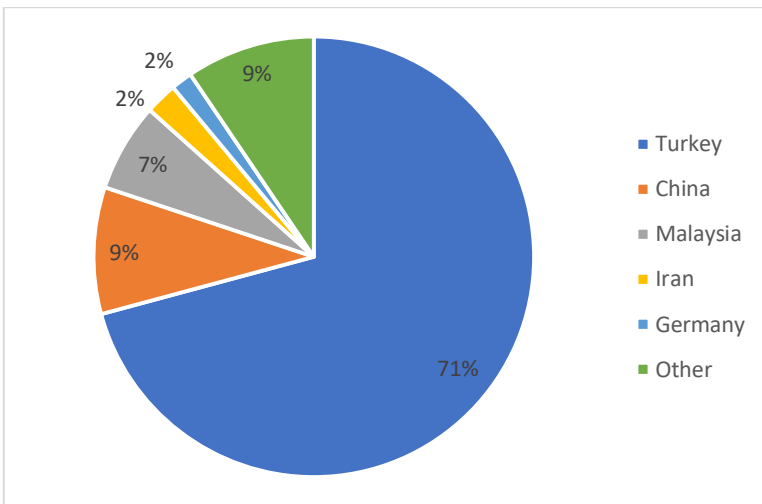
Source: Authors’ own calculations, USAID 2022.

Chart 12 shows the value of Georgian PPE imports for the period of 2014-2021 along with the country’s top countries of origin for this value chain in 2021. As a result of increased demand due to the pandemic, PPE imports increased significantly from 2020 onwards, and in 2021 compared to 2020 the growth in imports amounted to 47.1%, reaching USD 76.3 million. In 2021, most PPE was imported from Turkey (71%), China (9%), and Malaysia (7%). Imports from other countries constituted 13% of total imports.

**Chart 12:** Georgia’s imports of PPE (2014-2021) and the top countries of origin (2021)



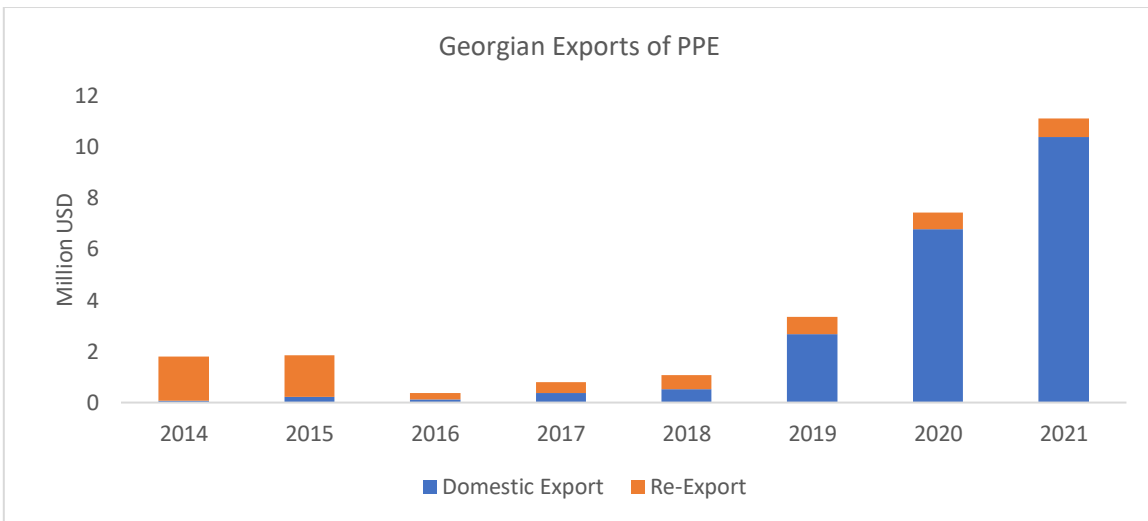
<sup>14</sup> Median number of employees is 16.

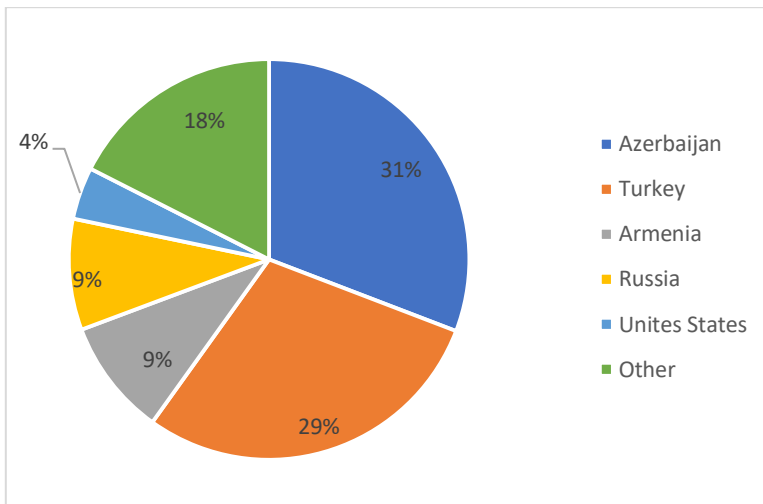


Sources: GeoStat; UN Comtrade

During the COVID-19 pandemic, exports of PPE also increased significantly. Indeed, in 2021, the value of Georgian PPE exports increased by 53.3% compared to the previous year. In the same year, the majority of Georgian PPE goods were exported to neighboring countries - Azerbaijan (31%), Turkey (29%), Armenia (9%), Russia (9%) – while 4% went to the United States of America.

**Chart 13:** Georgia’s PPE exports (2014-2021) and the top destination countries (2021).

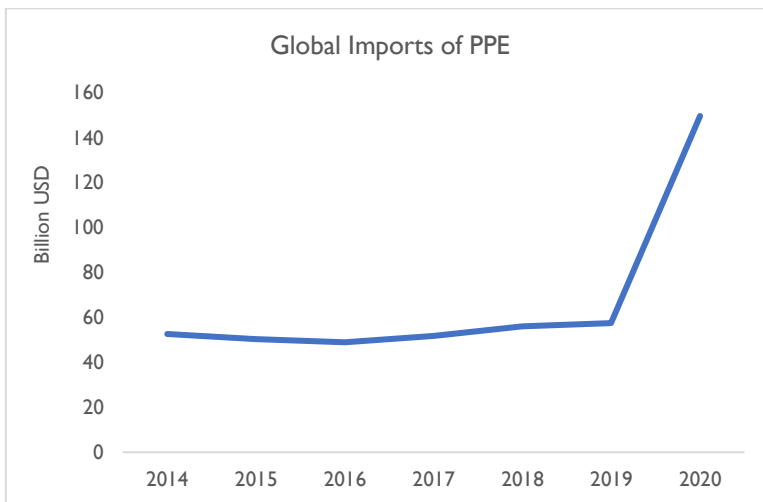




Source: Geostat; UN Comtrade

Global trade in PPE has increased significantly during the COVID-19 pandemic, with the total value of imports increasing by 162% in 2020<sup>15</sup> compared to the previous year and amounting to USD 149 billion (Chart 14). This could be explained by the global growth in demand for respiratory and other medical PPE during the pandemic.

**Chart 14:** Global PPE imports, 2014-2020.

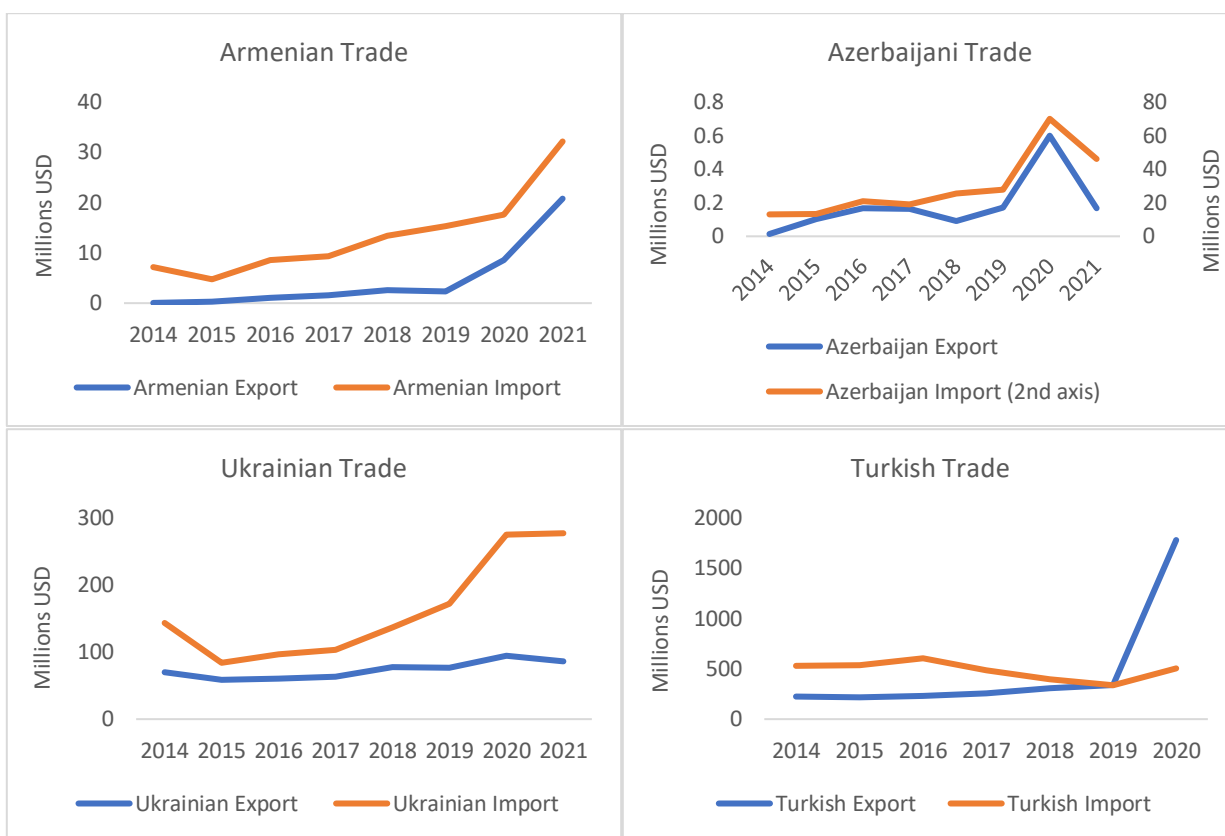


Source: UN Comtrade

Chart 15 shows the dynamics of trade in PPE in countries bordering or near Georgia. In 2020, compared to 2019, exports and imports increased in all four countries. The sharpest increase in exports was recorded in Turkey (430%), and the fastest growth in imports was reported in Azerbaijan and Ukraine over the same period. In 2021, Azerbaijan's exports and imports declined sharply to almost pre-pandemic levels, while imports in Armenia and Ukraine increased.

**Chart 15:** Regional trade in PPE, 2014-2021

<sup>15</sup> Data on global imports of personal protective equipment for 2021 are not available on the UN Comtrade platform.



Source: UN Comtrade<sup>16</sup>

### 1.3.3. GLOBAL TRENDS IN THE PRODUCTION OF MEDICAL PPE

During the COVID-19 pandemic, there has been unprecedented growth in the demand for medical PPE, transforming the value chain's dynamics at both domestic and international level. In 2019, the global market for medical PPE amounted to USD 8 billion (equating to 15% of the total market for all types of PPE) and was mainly concentrated in the USA and Asia. In particular, 60% of most types of PPE was produced by the USA and China, except for gloves, which were mainly manufactured in Malaysia and Thailand. During the pandemic, the global production of medical PPE has soared, increasing, according to experts, by at least 300%, mainly due to the increase in the production of medical face masks and gloves.

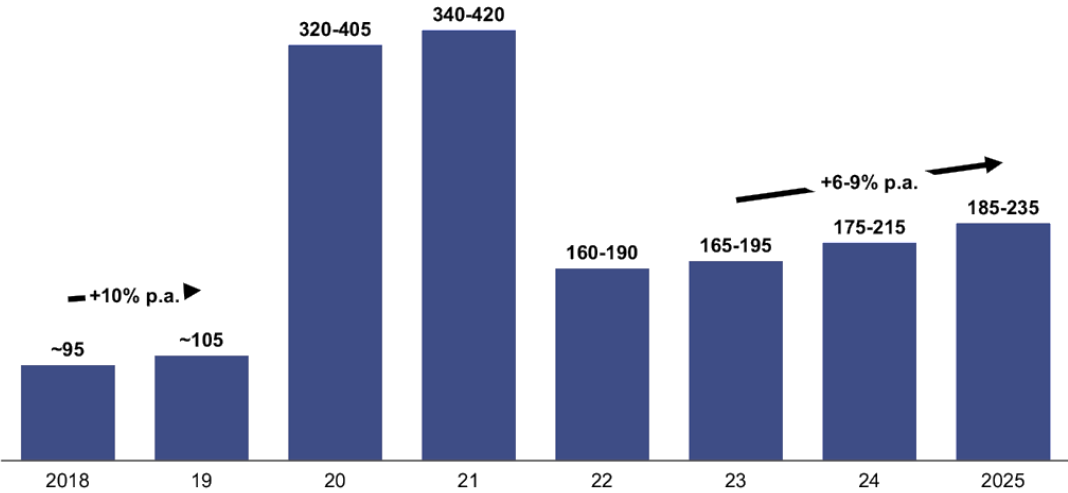
As for Europe, before the pandemic, the PPE market was dominated by Germany, the UK, and France, with mainly high-quality products. Their competitiveness on the global market was low because of the relatively high price and they were mainly focused on the European market (65-85% of exports of European producers went to the European market). The European market was nevertheless significantly dependent on Asian imports even before the pandemic. Once the pandemic hit, European production increased with the support of governments to address the PPE shortage in Europe (caused by increased demand and export restrictions introduced by the main importing countries). By the end of 2020, shortages of certain types of PPE were still being recorded, however surplus production was observed for some products in some countries, for example face masks in the UK and France.

The sudden increase in production volumes put the entire PPE manufacturing value chain under significant pressure. Firstly, there was a shortage of raw materials, especially non-woven material used to manufacture face masks and respirators. In addition, production was limited by manufacturing plant capacity (which was

<sup>16</sup> 2021 trade data for Turkey had not yet been published by UN Comtrade at the time of writing.

difficult to upscale in a short period of time) that mostly affected the production of gloves and other regulated products. In addition, trade was adversely impacted by bans on exports of PPE and raw materials being introduced by a number of countries.

**Chart 16:** Forecasted demand for PPE, 2018-2025, billion units<sup>17</sup>



Source: IFC, 2021.

According to the latest forecast of the International Finance Corporation (IFC)<sup>18</sup> (made on the basis of many assumptions, including different scenarios of the spread of the coronavirus and immunization rates), the demand for medical protective equipment will decrease sharply from 2022, but will still exceed the pre-pandemic level and between 2023 and 2025 it will increase by 6-9% annually.

According to the IFC study, it is presumed that existing PPE manufacturers will be able to maintain a large market share along with the growth in demand, as they have already achieved cost-competitiveness and, during the crisis, they managed to increase production capacity and meet quality standards. As for new manufacturers, entering the market after demand has already peaked will be less attractive for them due to the decrease in PPE prices caused by the increase in production volumes. However, given the projected growth in future demand new entrants will be able to establish themselves in the market, provided they can meet quality standards, stay relatively cost-competitive, and attract government support.

<sup>17</sup> Unit means 1 item, 1 pair of gloves, 1 liter of disinfectant liquid, and 1 kg. chlorine.

<sup>18</sup> The forecast was made in March 2021.

## 2. POLICY CHALLENGES

In the subsections below an overview of the information on challenges in the construction materials and PPE value chains, obtained during interviews with stakeholders, is presented. Most of the opinions provided in the subsections belong to the interviewed stakeholders, including representatives of private and public sectors, business associations, and donor organizations, as well as relevant experts. The most critical challenges identified by the majority of respondents are summarized below.

### 2.1. CONSTRUCTION MATERIALS

#### 2.1.1. CHALLENGES RELATED TO PUBLIC PROCUREMENT

Public procurement and related policy were the most debated topic among the policy challenges covered during in-depth interviews with stakeholders and at the meetings of the project's working group. In general, as shown by the study, public procurement is an important channel for companies producing building materials to sell their products on the domestic market. Therefore, searching for ways to address relevant policy challenges and solving them with the involvement of relevant stakeholders could bring substantial economic benefits to this value chain in the short term.

As the production of construction materials is directly related to the construction sector, the construction materials value chain is related to procurements in construction industry - both in terms of design services and procurement of construction services required for project realization.

Although designing, in most cases, represents a small portion of the estimated total project cost (2-3% according to respondents), the majority of stakeholders stated that a research-based, sound, and high-quality design would serve as a cornerstone for the successful implementation of any construction project.

Among the challenges at the design stage, the main identified aspects related to *the rule and policy for public procurement of designing and cost-estimating services; the rules and norms for developing project cost estimates; improvement of supervision at the project design stage; and improvement of the current practice of market research.*

In addition, among the challenges identified in relation to public procurement, compliance of *the rules for establishing technical and functional specifications with the law*, as well as the competencies for setting specifications when preparing tender announcements, which in turn is associated with the competencies of the relevant staff of contracting organizations, were deemed critically important.

#### 2.1.2. CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION

The field research and desk studies revealed that difficulties related to certification, laboratory testing, and standardization together represented a priority challenge for the value chain. To address this challenge, many initiatives are already in place, most of which are supported by donor organizations; However, the survey showed that the challenge is still relevant and needs to be addressed using a more comprehensive approach through the involvement of different stakeholders.

Under the challenges related to product certification, laboratory testing, and standardization, we have taken into consideration the needs found to be common to the majority of stakeholders, both from the private and public sectors, as well as from donor organizations. In particular, they put an emphasis on two main aspects: first, the low awareness of relevant economic operators about the quality and safety



requirements set by the technical regulations in line with EU legislation; and second, limited access to accredited conformity assessment bodies.

Besides, important to emphasize the difficulties shared by one of the interviewed respondents, when determining the conformity of local production with labor safety standards in Georgia. This particular stakeholder produces structural elements (such as scaffolding and racks) and often faces problems in terms of compliance with labor safety standards. Specifically, as claimed by the respondent, the Labor Inspection Office considers the products manufactured by these economic operators as being handicraft products and non-compliant with safety standards. Specifically, they are not able to prove the conformity of their domestically produced products with labor safety standards through the existing Georgian testing authorities. Lack of innovations and innovative skills

### **2.1.3. LACK OF INNOVATION AND INNOVATIVE SKILLS**

Almost none of the respondents or the bodies they represent have a research and development (R&D) department, any plan for product improvement, or any personnel working in these areas. The lack of R&D and innovations clearly affects the competitiveness of production on domestic and foreign markets. As for large companies and representative offices of brand-name construction companies, local offices generally receive R&D plans and directives from headquarters (in the USA, Europe, etc.) to guide their activities.

According to representatives of the private sector, contracting organizations are less flexible and innovative either, even in public procurement processes. Generally, contractors opined that they prefer old-fashioned services, and that there was no demand for innovative solutions. Moreover, modern approaches, methods, and technologies are rarely taken into account, which significantly hinders the development of the value chain.

Practice shows that in developing countries advances in innovation and R&D are made when an investor enters the market with their own technology, know-how, and transfers and/or shares their experience with local producers. This revitalizes the market and contributes to the development of the particular value chain and others associated with it, including.

As the survey showed, almost all representatives of the private sector confirmed the need to invest in projects related to R&D and innovation to improve their competitiveness, while many were also concerned about the current innovation ecosystem in the country, which they claim is not yet sufficiently developed. According to some of them, strengthening cooperation with scientific and technological agencies, as well as improving access to high-tech machinery and generally encouraging innovation, would all help to overcome this problem.

### **2.1.4. BARRIERS TO ENTERING GLOBAL EXPORT MARKETS**

The challenges related to entering global export markets for construction materials cover the following several aspects:

**TECHNICAL BARRIERS:** Based on the implemented field research and desk studies, when exporting construction materials, one of the most pressing challenges is quality certification, which is a complex and costly process (according to the available information, the cost of a complete laboratory quality test for each product can reach USD 10,000-50,000). As recommended by some of the private sector, the state should encourage exporters of construction materials and provide co-financing to allow product to be certified and thereafter exported.

**LOGISTICAL PROBLEMS:** In general, logistics for construction materials is a global challenge. In the case of Georgia, the country lacks direct land connections with various large markets including the EU, while its land transportation services are underdeveloped. These factors, among others, slow down the logistical processes and increase costs accordingly. In addition, the country lacks consolidators and good consolidation practices, which are key components of successful exports. The private sector representatives thus recommend strengthening the capabilities of consolidators and creating/organizing joint warehouses.

**FINDING INTERNATIONAL BUYERS/IMPORTERS:** According to the representatives of the private sector, research undertaken on target export markets, the study of market characteristics, and searching for international clients are all rather complicated processes that constrain Georgian exporters. It was recommended by the private sector that the participation of Georgian manufacturers in international exhibitions be better supported and that such opportunities be taken more effectively.

**COMPETING AGAINST PROTECTIONISM WHEN EXPORTING TO NEIGHBORING COUNTRIES:** According to the private sector representatives, the markets of neighbouring countries (mainly Turkey, Russia, and Azerbaijan) are characterized by protectionism in the form of various tariffs, quotas, or subsidy policies (with the intention to develop local production capacities), while the approaches of free trade and the countries with open economies do not tolerate such restrictions. Among Georgia's neighbouring countries, cases of successful exports were reported by interviewees as being most frequent to Armenia, which is a smaller country compared to others.

AMONG IMMEDIATE RESULT OF THE ONGOING PUBLIC-PRIVATE DIALOGUE, IT IS WORTH MENTIONING THE INITIATIVE BY THE REPRESENTATIVE OF ENTERPRISE GEORGIA (EG) AT THE SECTORAL WORKING MEETING. According to this initiative, based on application to EG by the producers of construction materials, there would be a possibility to include the value chain of Georgian construction materials into the list of priority sectors of Enterprise Georgia's Export Assistance Program. If later the sector is recognized as a priority, it will have access to services within the framework of the EG's export assistance program.

For this purpose, the Georgian Construction Materials Cluster (GCMC) has started working on the preparation of the relevant letter. Later, on the initiative of the EG, meetings were organized between the export-oriented members of the cluster and the representatives of the EG. This issue is currently being examined by the agency.

#### **2.1.5. LOW AVAILABILITY OF SKILLED LABOR**

The feedback from the interviews as well as the findings of the desk study showed that vocational education and training (VET) institutions in Georgia are characterized by low productivity, and that the private sector is facing impediments in hiring professionals and skilled labour. As opined by the stakeholders, the curricula and specializations of VET institutions do not correspond with the needs of the private sector. Moreover, vocational schools lack both the resources and incentives to develop new modules and syllabuses that will be subject to accreditation.

In addition, the common practice of teaching using outdated methods and literature (including textbooks published in the Soviet era) in higher educational institutions was revealed during the qualitative survey. As a result, students interested in construction are not taught material that corresponds to modern requirements, standards, and trends. According to the most of stakeholders, young people's interest in the construction sector is yet weak. In general, most of the feedback from respondents as well as the findings of the desk study indicated that it was prevalent for companies in the sector to contract foreign professionals (designers, engineers, technicians, etc.).

Some big businesses in construction have been trying to solve the problem of the low availability of qualified personnel on their own by establishing and developing their own schools (e.g., Knauf, which was established with the support of GIZ) tailored to the needs of relevant business actors. In such cases, the companies have developed syllabuses and trained their staff. However, the founders of some of these schools claimed that only 10% of graduates were able to successfully complete the training course, indicating a low level of basic skills. The majority of interviewed stakeholders considered strengthening construction materials VET institutions and active engagement with the private sector to develop professional modules and programs tailored to the needs of the sector as important steps that needed to be taken to address this issue. The creation of the Vocational Skills Agency<sup>19</sup> under the Ministry of Education and Science of Georgia, whose main task is to provide professional education based on public-private partnership, responds directly to this shortcoming. Already, a number of international donor organizations and donor-supported programs cooperate with the Agency.

#### **2.1.6. INEFFICIENT MANAGEMENT OF CONSTRUCTION WASTE**

Waste management has been identified as one of the most important challenges for producers of construction materials. According to some representatives of the private sector, the policy of supervision of waste construction materials in the country is perceived as strict and this often leads to business disputes.

In addition, most business actors in this value chain outsource waste management services, however, in most cases, the processes cannot be traced and are not well organized. Therefore, the relevant interviewed stakeholders emphasized the necessity of improving such services.

It is important to note that, according to a representative of the Georgian Cement Association, as well as one of the major business actors, all cement companies have the capacity to utilize pretreated household waste, which involves burning such waste in cement kilns. Therefore, according to some respondents, making better use of this capacity represents an important opportunity for the value chains to increase the efficiency of waste management.

#### **2.1.7. CHALLENGES RELATED TO BUSINESS DISPUTES**

Some respondents expressed their concern regarding inefficient and inflexible lawsuits. According to them, delays in court proceedings as well as the insufficient competence of judges to consider specific disputes are the main problematic factors here. Some opined that one of the best ways to address this challenge would be to use the arbitration courts actively as an alternative instrument for resolving disputes between parties (both legal and physical), as allowed by Georgian legislation. Accordingly, any effort or initiative aimed toward developing arbitration in Georgia and the active use of the arbitration courts would help businesses to protect their interests in a more flexible and effective manner.

## **2.2. PERSONAL PROTECTIVE EQUIPMENT (PPE)**

### **2.2.1. LOW AVAILABILITY OF SKILLED LABOR**

The absolute majority of respondents highlighted the lack of qualified personnel as one of the main problems in the PPE value chain, which, in their opinion, significantly reduces labor productivity, affects the competitiveness of companies, and the development of the value chain as a whole. Crucially, there is a shortage of both low-skilled (e.g., tailors) and highly skilled (e.g. designers and technicians) candidates on

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<sup>19</sup> Created in April 2021.

the labor market. Accordingly, most manufacturers train and retrain personnel themselves in the workplace and often hire trainers from abroad.

The interviewed stakeholders identified several main reasons for the low availability of labor force, three of which are covered in detail below.

**INEFFECTIVE COOPERATION WITH STATE VET INSTITUTIONS:** Most of the respondents, making products like PPE requires complex and specific skills and knowledge, and the existing VET institutions do not offer appropriate training in this regard. According to some of the interviewed stakeholders, the teachers of professional educational institutions themselves need to improve their qualifications and increase their experience in this area. Representatives of companies which cooperate with VET institutions expressed their dissatisfaction with the level of qualification of employees to have been trained in such institutions.

According to some respondents, the skills of graduates of professional educational institutions working in their enterprises did not correspond with their needs. Some asserted that the effectiveness of professional education in general and the mechanism for the employment of retrained personnel should be improved, as graduates often find work in other fields and do not put the knowledge gained to effective use.

As observed by the researchers engaged in the study, actors in the private sector often retrain their personnel themselves, using internal resources. Such practice usually involves hiring professional trainers and teachers from abroad (mainly from Turkey) and improving the knowledge and skills of personnel through practice-based teaching methods. One of the surveyed companies (which produces, among other products, body armor vests) even contracted an Italian school and negotiated the opening of a specialized educational institution in Georgia. However, due to the COVID-19 pandemic this was postponed and is yet to resume.

**OUTFLOW AND TURNOVER OF WORKERS, MAINLY CAUSED BY THE CREATION OF NEW ENTERPRISES:** According to many respondents, newly created companies offer better conditions to their employees than older competitors, which makes it difficult for older companies to retain personnel. The outflow of workers significantly complicates the operation of enterprises (especially small ones), and leads to additional costs in finding, hiring, and training new employees.

In general, tailoring jobs are in fairly high demand in the country, and tailors who leave a company can quickly find a new job and often a higher salary elsewhere. Representatives of companies that are understaffed talked about the problem of maintaining quality and stability. During the qualitative study, cases of employees violating their labor contracts to take on higher-paid work elsewhere were identified, with some cases going to court.

**LOW INTEREST ON THE LABOR MARKET IN EMPLOYMENT IN THE PRODUCTION SECTOR IN GENERAL:** According to representatives of the private sector, the level of engagement of young people is especially low, which leads to difficulties in attracting and retaining staff in production processes.

### **2.2.2. LIMITED ACCESS TO FINANCE**

Limited access to finance along with the low availability of skilled labor are among the main problems for the private sector in this value chain. Most of the respondents said they were unable to upgrade their equipment and improve technological processes due to a lack of finances, resulting in the low productivity of these enterprises. In particular, many require additional human resources, the attraction of which is also challenging.

Some respondents stated they cooperate with banks, while some refrained from taking loans due to the unpredictability of the business environment. Meanwhile, some respondents lacked collateral against which to borrow money from a bank.

As for state programs supporting business development, some respondents had participated or were participating in programs designed to facilitate access to finance for companies (e.g., those of Enterprise Georgia and Georgia's Innovation and technology Agency (GITA)). Most of the respondents considered such programs important for the development of the private sector and generally positively evaluated their activities, albeit some noted that the opportunities to obtain support for large-scale projects were insufficient.

### **2.2.3. CHALLENGES RELATED TO PUBLIC PROCUREMENT**

Some respondents had successfully participated in public tenders; however, some had endured negative experiences in the past and now refrained from entering. Representatives of companies to have faced challenges in the past, cited two main problems.

First of all, the main problem was the rules of procurement used in public tenders according to which a bidder offering the lowest price wins and no attention is paid to the quality. This, they claimed, creates unhealthy competition on the market and often producers of better-quality products are not selected. Second, contracting organizations lack skills to develop suitable criteria for tendering processes. In particular, contracting organizations do not tend to conduct product research when preparing for tendering processes (e.g., the time needed to transport raw materials is often not taken into account).

### **2.2.4. LIMITED ACCESS TO LOCAL ACCREDITED LABORATORIES**

Quality and safety control in specialized testing laboratories is one of the most important steps in PPE-related processes. However, according to most of the interviewed economic operators, this field is currently at the initial stage of development in Georgia (in response to emerging demand for this type of laboratory). In the opinion of many of them, testing of all types of fabric is currently unavailable in Georgia, so some companies have created in-house testing laboratories for this purpose.

As competition for laboratory testing services for PPE materials in the country is very low, with testing of such products carried out mostly by the Samkharauli National Forensics Bureau, prices for available laboratory tests are high.

According to many of the interviewed representatives of companies, the fact that the tender conditions often require the submission of laboratory test results, which cannot be produced in Georgia, is a particularly big challenge (e.g., sun bleaching, water resistance, and abrasion testing). Therefore, producers have no option but to send samples of their products for testing abroad, which increases costs.

Some representatives of the public sector also shared these views on the challenges associated with testing laboratories. In particular, the Market Surveillance Agency faces difficulties similar to those of the private sector and in some cases, it has to send samples for testing to Turkey or European countries.

### **2.2.5. INSUFFICIENT LEVEL OF PUBLIC-PRIVATE DIALOGUE**

According to many of the interviewed stakeholders, there is a lack of effective communication and/o cooperation between the public and private sectors with regard to the PPE value chain. This may be attributable to the absence of a proper public-private dialogue (PPD) platform. Ineffective and insufficient communication, in turn, leads to a lack of awareness in the public sector about the problems facing the

private sector, which, according to many respondents, hinders or slows down efforts to solve existing problems. Several respondents also claimed interest on the part of the state in innovative start-ups was lacking, which may negatively affect the competitiveness and the development of the value chain. To illustrate the inefficient communication between public and private sectors, an example of unsuccessful cooperation between an innovative start-up and one of the state bodies was given. Here, a company working on the development of an innovative product wanted to develop/improve and test its own products in cooperation with state agencies (the exclusive potential users of these products). However, despite long negotiations, the aforementioned cooperation did not materialize, which significantly delayed the product development process.

#### **2.2.6. DEPENDENCE ON IMPORTED RAW MATERIALS**

Georgian PPE manufacturers largely use imported intermediate products as raw materials (including textiles, threads, leather, metal, rubber, and plastic accessories). Such materials are mainly imported from Turkey and China. This dependence on imported raw materials creates many problems for companies. According to many respondents, the most acute problems are related to transportation and the instability of the Georgian currency (GEL). In addition, fines imposed for violation of terms stipulated in conditions of the state tender was cited as a significant problem. Meanwhile, the time needed to transport raw materials is a significant factor for enterprises manufacturing products based on specific orders from the private or public sector. In this regard, the problem of shipping time became especially acute during the COVID-19 pandemic, when the movement of goods from China was disrupted, and the export of non-woven fabric<sup>20</sup> from Turkey was temporarily prohibited. One respondent was severely affected by the cutting-off of supplies of raw materials from China at the onset of the pandemic, which prevented their company from meeting the terms of the tender. As cited by the respondent, despite attempts being made to negotiate, the state did not take into account the pandemic context and imposed a fine on the company and included it on a "blacklist." According to representatives of the private sector, these problems can be solved through the development of local capacities for the production of textiles and other materials. To achieve this goal, some private sector representatives proposed conducting a feasibility study as a first step. According to many respondents, several business plans were prepared by the private sector in cooperation with the MoESD, but they have not yet been implemented.

#### **2.2.7. LACK OF INNOVATIONS AND INNOVATIVE SKILLS IN THE PRIVATE SECTOR**

To increase the competitiveness of the value chain both on the local and export markets, innovative approaches are invaluable, especially when the production of PPE in Georgia is completely dependent on imported raw materials. However, currently most of the companies participating in the survey neither had innovation or research and development (R&D) departments nor specialists engaged in these activities. Furthermore, according to many representatives of the private sector, access to high-tech facilities is limited (which is needed for high-tech start-ups to create new product prototypes). Some of these technologies exist in the country, for example, at the State Military Scientific-Technical Center "Delta", however, they are not accessible for private companies. According to many interviewed representatives of companies, in this regard potential cooperation with Georgia's Innovation and Technology Agency (GITA) could play an important role in encouraging innovation and improving innovative skills in the private sector. Many respondents noted that improved access to technical infrastructure/technologies of "Delta" and GITA would mark a very important step.

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<sup>20</sup> Used as one of the main raw materials in medical PPE (face masks, medical gowns, etc.).

### 3. PRIORITY CHALLENGES

As described in the methodology, to identify the most pressing problems in the value chains an electronic questionnaire was developed and used by members of the working group to evaluate the problems identified as a result of the interviews conducted at the first stage. The results of the survey of representatives of the construction materials value chain are summarized in Table 1 with challenges listed in ascending order according to the overall score they were assigned.

**Table 1:** Ranking of priority challenges selected by stakeholders.

#	PRIORITY CHALLENGES	SCORE
1	Challenges related to public procurement	208
2	Challenges related to certification, laboratory testing, and standardization	202
3	Barriers to entering global export markets	196
4	Lack of innovations and innovative skills	196
5	Challenges related to business disputes	185
6	Low availability of skilled labor	180
7	Inefficient management of construction waste	161

Looking at the hierarchy of priorities chosen by each group of stakeholders allows us to identify the similarities and differences between groups with respect to which aspects they deemed most important, as summarized in the table below.

**Table 2:** Priority challenges by the groups of stakeholders.

#	PRIORITY CHALLENGES (PRIVATE SECTOR)	PRIORITY CHALLENGES (PUBLIC SECTOR)	PRIORITY CHALLENGES (DONOR AGENCIES AND NGOS)
1	Challenges related to certification, laboratory testing, and standardization	Challenges related to public procurement	Lack of innovations and innovative skills
2	Challenges related to public procurement	Challenges related to certification, laboratory testing, and standardization	Challenges related to public procurement
3	Barriers to entering global export markets	Low availability of skilled labor	Barriers to entering global export markets
4	Lack of innovations and innovative skills	Lack of innovations and innovative skills	Challenges related to business disputes
5	Challenges related to business disputes	Barriers to entering global export markets	Low availability of skilled labor
6	Low availability of skilled labor	Challenges related to business disputes	Inefficient management of construction waste
7	Inefficient management of construction waste	Inefficient management of construction waste	Challenges related to certification, laboratory testing, and standardization

The table above shows that the first two priority challenges (“challenges related to public procurement” and “challenges related to certification, laboratory testing, and standardization”) are equally relevant for the private and public sectors, whereas for donors and NGOs, research and development (R&D) is of the highest priority, while quality certification is less important. This could be explained by the fact that as donor organizations are regularly working on these issues, the challenge is more familiar to them, and they



are already implementing a number of projects and initiatives in this area. Crucially, challenges related to public procurement are of the highest priority for all three groups.

As for the survey of representatives of the PPE value chain undertaken via an electronic questionnaire, due to the low feedback received, the research team decided to prioritize the challenges that had been most frequently discussed during the individual interviews, focus group, discussions and working meetings. Crucially, the discussion was often focused on public procurement and limited access to conformity assessment bodies. Consequently, the following sections concentrate on these two key policy challenges for both the construction materials and PPE value chains.

### **3.1. PRIORITY CHALLENGE I: CHALLENGES RELATED TO PUBLIC PROCUREMENT**

In this subsection, this priority challenge is discussed from the perspective of both sectors. On the basis of the analysis of public-procurement-related issues discussed by stakeholders at different stages of the project implementation, as well as the main findings identified within the framework of the desk research, this challenge can be broken down into several elements, each of which is introduced and described below.

#### **PROCUREMENT RULES (INCLUDING FOR PROJECT DESIGN AND COST-ESTIMATING SERVICES), AND PROCUREMENT TOOLS AND EVALUATION CRITERIA USED IN THE GEORGIAN ELECTRONIC GOVERNMENT PROCUREMENT SYSTEM OF THE STATE PROCUREMENT IN GEORGIA (CONSTRUCTION MATERIALS VALUE CHAIN)**

In general, as mentioned above, although design in most cases represents a small portion of the total project cost estimate, a high quality of design that meets international standards is key to the successful implementation of the project. Regarding this issue, the interviewed producers of construction materials were concerned mainly about the method of procurement for design services and the policy for setting evaluation criteria. According to the majority of respondents, tender winners, meeting the minimum qualification requirements, are determined specifically by the price, with less attention paid to assessing the quality of the project proposal, which may depend on various factors including experience, methodology, approach, and qualification of the workforce. Based on the opinions expressed by the interviewed stakeholders, it is common practice to reward companies that offer half the starting price or even less. With such an approach, the quality of construction cannot be ensured.

Some of the surveyed respondents claimed that one of the ways to solve this challenge would be to procure design services through competitions. They asserted that this would be a much more effective method than procuring services based solely on the price criterion (NAT/SPA). Indeed, this approach ensures the high interest and involvement of specialists, which, according to some respondents can be the most important factor when it comes to attracting and developing qualified human resources still available in the country. For example, according to many stakeholders, the average age of highly-qualified engineering and technical personnel in Georgia is relatively old, and if they are not given the opportunity to use their skills now (which, in turn, will contribute to the emergence of newly-qualified specialists on the market), in a few years the country will have no option but to search for and hire expensive personnel from abroad, while the process of building up a pool of qualified specialists domestically would take much more time as well. They claim that increased demand for quality design services in public procurement would contribute to the retention and development of skilled personnel (engineering, technical, or other). Based on the opinions expressed by stakeholders during the field survey, contracting organizations face difficulties in procuring design services through competitions for the following two main reasons: time - the competitive procurement process takes longer than tenders decided solely on the price criterion (NAT); and competence - limited availability of skilled labor in the relevant contracting organizations.



In this regard, the Order of the Chairman of the State Procurement Agency made on May 22, 2015, is noteworthy. This determines the rules and conditions for public procurement of design services through a competitive process. Its purpose is to regulate, coordinate, and monitor activities related to competitive public procurements. Article 7 of this Order authorizes a contracting organization to establish various types of quality assessment criteria, as well as a quantitative criterion, based on which the highest score is assigned to the bidder whose technical documentation surpasses the minimum/maximum requirement established by the conditions of the competition to a greater extent than others.

The Order of the Chairman of the State Procurement Agency made on July 26, 2016, should also be noted here. This established a new method for conducting electronic tenders known as the two-stage tender, which, unlike ordinary tenders, ranks bidders not only by price and instead takes into account both quality *and* price. According to the Order, a contracting organization, depending on its goals, is authorized to determine various quantitative criteria when evaluating a tender proposal.

In the opinion of the research team, Georgia's existing legal framework is well developed to respond to challenges related to procurement rules, including those related to the rules for procurement of design services. However, the will and competence of most contracting organizations to determine and select appropriate criteria for the procurement of specific services remains questionable.

### **SELECTION RULES AND EVALUATION CRITERIA FOR PUBLIC TENDERS - PPE VALUE CHAIN**

Representatives of the private sector from the PPE value chain frequently expressed their concerns about current procurement practices of contracting organizations in state tenders, where the winner is determined solely by price, and quality criteria are not used to rank bidders. As claimed by many respondents, this approach causes unhealthy competition in the market, as in most cases the bidder who supplies the cheapest and lowest-quality products wins. As a result, the contracting organization receives low-quality products, the quality control of which, in their opinion, is not carried out properly.

This challenge is closely related to the above-discussed challenge facing the construction materials value chain, and the reasons behind it are similar too. Therefore, if one solution proves effective in one value chain and efforts are put to address the mentioned policy challenge, it will become valuable for the other.

#### **➤ BEST PRACTICE**

Since 2004, new procedures for competitive procurement, including a new and flexible tool (competitive dialogue), have been introduced into the EU's public procurement directives. Competitive dialogue is a procedure involving a contracting authority and a supplier to develop one or more alternative solutions designed to meet the needs of the former. After considering several alternative solutions, the contracting authority chooses the most suitable. An example of competitive dialogue is provided in the Explanatory Note on Competitive Dialogue<sup>21</sup>, describing a contracting authority, when implementing one of his infrastructure projects, is not confident about choosing the best technical solution suitable for its needs. Therefore, the contracting authority applied competitive dialogue, discussing possible solutions to this specific need with different bidders individually and making an informed decision. Other procurement procedures aligned with EU directives are discussed in the next subsection.

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<sup>21</sup> Explanatory Note on Competitive Dialogue in the Classic Sector, European Commission, January 2006.

## **RULES AND NORMS FOR DEVELOPING PROJECT COST ESTIMATES - CONSTRUCTION MATERIALS VALUE CHAIN**

At present, cost estimators operating in Georgia, when costing the construction materials needed for the project, are mainly guided by the so-called resource method – the quarterly edition "Guide of Prices of Construction Resources" issued by the Union of Construction Appraisers. According to the absolute majority of surveyed stakeholders, cost estimates developed using this method often do not correspond to market prices and, accordingly, the actual cost of projects. The challenges facing the private sector when applying the resource method include the following:

- Having to specify the names of construction materials, as detailed technical characteristics of specific products are often scarce;
- Traceability of the provided prices and how these are determined (i.e., is the average price of alternative suppliers taken into account?);
- Taking into account changes in the exchange rate (i.e., when the price of imported construction materials is determined in a foreign currency, does the resource method take into account the percentage range of quarterly fluctuations in the GEL exchange rate against foreign currencies?);
- Ensuring that products specified in the Guide of Prices of Construction Resources conform with international quality standards; and
- The guide mentioned above being issued in printed form and not being available electronically.

In response to this challenge, the interviewed representatives of the private sector proposed the concept of an electronic system for costing construction materials as an alternative approach. This would be a kind of platform that allows manufacturers and importers of construction materials, as well as stakeholders related to the construction materials value chain, to submit applications to add a specific construction material and the corresponding price to an electronic system. In addition, the products in the electronic system would be grouped and classified by product codes and parameters, such as technical, engineering, thermal insulation, acoustic, and other parameters specific to each product. The system could be accessed by relevant employees of the State Procurement Agency, experts and other stakeholders. According to the surveyed representatives of the private sector, the mentioned approach is at the concept stage. If the electronic system is eventually introduced, the state, among other advantages, will be able to examine cost estimates more efficiently and transparently.

In the context of the development of cost estimates for construction projects, the regulatory framework<sup>22</sup> for construction standards - Construction Norms and Regulations СНиП -IV-1984 - widely used in construction including in the development of construction project cost estimates, should be noted. According to the majority of surveyed stakeholders, the mentioned norms and regulations are outdated, do not correspond to modern approaches, methods, and technologies in the construction sector, and lack flexibility. This issue is one of the biggest challenges for the construction sector as a whole, however the country's approximation with European standards presents a substantial opportunity to develop the country's construction sector and ensure that it meets international standards. As part of the ongoing transition toward EU standards, the Construction Policy Department of the Ministry of Economy and Sustainable Development is currently working on the transition from " СНиП" to Eurocodes related to project designing. The process of translation of its main part has been completed and the registration of Eurocodes started earlier in 2022, however their introduction will involve several transition periods. First

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<sup>22</sup> According to Order N52 of January 14, 2014 of the Prime Minister of Georgia on Validity of Operation and Recognition of Technical Regulations of Construction in Georgia, in order to regulate the construction sector, until the adoption of relevant technical regulations, standards and rules valid before 1992, other regulatory documents and their parts, whose alternatives do not exist in the form of technical regulations adopted in Georgia and which do not contradict the current legislation of Georgia and the international agreements to which Georgia is a party, are recognized as valid and applicable on the territory of Georgia.

of all, prior to the enactment of Eurocodes, the sector shall be informed accordingly, and relevant educational programs shall be launched. Although the text of the regulation on structural design is identical for all EU Member States, EU standards are based on democratic principles allowing EU Member States to include country-specific parameters and requirements in their "national annexes." In Georgia, "national annexes" are developed by the Georgian National Agency for Standards and Metrology, where a special construction committee consisting of practitioners and researchers has been formed to develop joint decisions on the development of national parameters.

➤ **BEST PRACTICE**

The HOAI (Honorarordnung für Architekten und Ingenieure) is a federal regulation that regulates fees for architectural and engineering services in Germany. Based on the information obtained during the field research, the regulation also classifies fees for design services depending on the nature and complexity of the design of a particular construction project. The mentioned categorization is also used during public procurement, when contracting organizations, taking into account the HOAI regulation, specify the fee for a specific category of architectural or other pre-project services. This approach helps to maintain and improve the quality of project design services.

**THE NEED TO IMPROVE THE DRAFTING OF TECHNICAL SPECIFICATIONS FOR TENDERS**

According to the majority of surveyed stakeholders of the PPE and construction value chains, in most cases tender announcements uploaded by contracting organizations in the system do not contain detailed technical specifications of requested products and are limited only to descriptions of general parameters. For instance, in the case of fabrics, the main parameters, such as thickness, density, sun bleaching, water resistance, fire resistance, and moisture resistance, are not indicated. The example of fabric here is provided for illustrative purposes only; the challenges related to drafting technical specifications concern most types of products or service. According to the surveyed stakeholders, such an approach creates significant risks in relation to the quality of products requested in the tender. The main reason for this challenge is considered to be the lack of competence among contracting organizations in drafting similar specifications. As shown by the results of survey, in total 4,500 contracting organizations are registered in Georgia, out of which about 2,300 are public schools. According to interviewed experts, this is a very high figure for a country of Georgia's size, and this contributes to the problem of drafting detailed specifications (small contracting organizations find it difficult to determine and define minimum quality specifications).

**3.2. PRIORITY CHALLENGE II: CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION**

As mentioned above, under the priority challenge related to certification, laboratory testing, and standardization, the following two main aspects are considered.

**LOW AWARENESS OF RELEVANT ECONOMIC OPERATORS ABOUT THE NECESSARY QUALITY AND SAFETY REQUIREMENTS STIPULATED BY RELEVANT TECHNICAL REGULATIONS**

According to many of the surveyed stakeholders, after the adoption of national regulations that are aligned with EU legislation, some of the economic operators registered in Georgia (manufacturers, importers, authorized representatives, distributors) find it difficult to adapt to the mentioned standards. Among them, the importers of potentially hazardous products who are unable to provide documents confirming the compliance of their products with EU standards. In addition, during market surveillance, there were many cases when economic operators in the supply chain had not been aware that their products were potentially hazardous. In such cases, the Market Surveillance Agency has to introduce restrictions on the sale of these

products in order to prevent these or similar products from entering the market, which may lead to disruptions in the supply chain.

#### **LIMITED ACCESS TO ACCREDITED CONFORMITY ASSESSMENT BODIES**

This problem should be considered from three main perspectives: for a product imported to Georgia; for a product produced in Georgia (intended to be sold on the local market); and for a product intended for export. In the case of imports of construction materials and PPE, the following common practice is observed: the compliance of products with quality and safety standards is evaluated on the basis of accompanying documents, however, as the stakeholders claim, there is limited access to laboratory testing to cross-check the various required parameters, as needed, in the country.

Georgian legislation determines the requirements and norms for locally produced construction materials and PPE products' compliance with the quality standards. However, according to many respondents, tender criteria for a number of public procurements may include a requirement for product quality conformity certificates which cannot be obtained through the currently available laboratory services and/or from existing accredited conformity assessment bodies.

## **4. CONCLUSIONS AND RECOMMENDATIONS**

### **4.1. CHALLENGES RELATED TO PUBLIC PROCUREMENT**

#### **PROCUREMENT RULES (INCLUDING FOR PROJECT DESIGN AND COST-ESTIMATING SERVICES), PROCUREMENT TOOLS, AND EVALUATION CRITERIA USED IN THE GEORGIAN ELECTRONIC GOVERNMENT PROCUREMENT SYSTEM**

To analyze the identified problems and present the final conclusions and recommendations, in this subsection we discuss the extent to which the current legislation on public procurement meets the mentioned challenges and also review best practices in relation to them.

##### **CURRENT LEGISLATION**

On July 19, 2017, several important amendments to the Law of Georgia on Public Procurement came into force. These concerned certain definitions, minimal terms for competitive procedures, rules for appealing tender decisions, and some other important legislative principles.

Now the regulations related to public procurement include a clearly-defined concept of electronic public procurement, covering different types of electronic procedure for different types of procurement.

According to the terminology used in the legislation, electronic public procurement includes three types of electronic means, which are discussed below.

- **ELECTRONIC TENDER.** In cases of electronic tender, the contracting organization uses quantitative requirements and specific evaluation criteria, which, in turn, implies the following methods for the conducting of a tender:
  - SPA (reverse auction) – involves a descending bid method, where the contract is awarded to the bidder who meets the qualification requirements established by the contracting organization and also offers the lowest price;
  - NAT (tender without reverse auction) - this is an open procedure without bidding rounds. Similar to the SPA tender, the contract has to be awarded to the bidder who meets all the requirements envisaged by the tender documentation and also offers the lowest price (the

- system automatically generates a ranking of bidders and reveals the identity and rank of the bidder which is the best among all participants);
- DEP (different acquisition procedures on construction works) – the contracting organization evaluates all submitted proposals equally regardless of bidder ranking. MEP (two-stage tender) - the ranking of bidders depends not only on submitted prices, but also on other measurable criteria defined by the contracting organization<sup>23</sup>.
  - **COMPETITION.** According to the legislation, this method is applied only in cases of procurement of design services. Here, the so-called principle of two envelopes is used, whereby the contracting organization, after completing an evaluation of the technical documentation and undertaking a quality assessment, takes into account the prices offered by bidders (until that point, the prices bid is unknown to the contracting organization).
  - **CONSOLIDATED TENDER.** This entails carrying out public tenders in a consolidated (centralized) manner, when the feasibility, terms, timeframe and items of procurement are established by the Government of Georgia, and procurements are conducted by a special commission authorized by the Government.

In addition, the Order of the Chairman of the State Procurement Agency made on May 22, 2015, determines the terms and conditions for state procurement of design services through a competition. Its purpose is to regulate, coordinate, and monitor activities related to state procurements carried out by competition. The Order of the Chairman of the State Procurement Agency made on July 28, 2016, which introduced a method of electronic tendering known as a two-stage tender is also worth noting here. This two-stage tender, unlike other forms of tender, ranks bidders depending not only on submitted price, but also considers quality.

The existing legal framework of Georgia allows for the opportunity to respond to challenges related to procurement rules, including those related to the rules for procurement of design services. However, the will, policy, budget, and availability of human capital in contracting organizations to determine appropriate rules and criteria for the procurement of specific services are all highly questionable.

In addition, according to the current legislation on procurement, design, cost-estimating, and other services can be procured through both tender (NAT/SPA) and competition (CNT). Since procurement through tender (SPA/NAT) is an easier alternative for contracting organizations compared to competition (which requires more time, resources, and competence), in most cases they prefer to purchase these services through tender<sup>24</sup>.

Therefore, based on the consultations held with relevant stakeholders, the research team recommends initiating a legislative amendment or drafting a new law on the procedures for procurement of design, cost-estimating, consulting, and similar services, ensuring that the procurement of the mentioned services is only done through a competitive tendering method (CNT).

Based on the above analysis, the research team makes the following recommendations

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<sup>23</sup> The essence of a measurable criterion is best depicted by the example of a LED lamp and a tungsten lamp: the unit price of the latter is much lower than that of a lamp made with LED technology, but it consumes much more electricity - in this case, the concept of a measurable criterion (i.e. the cost of consumed electricity) is relevant.

<sup>24</sup> According to the 2021 Activity Report of the State Procurement Agency, 37 competitions (CNT) and 31,773 electronic tenders in total were announced in 2021.

## RECOMMENDATIONS

- A legislative amendment or a new law on the procedures for procurement of design, cost-estimating, consulting, and similar services should be adopted, ensuring that the procurement of the mentioned services is only done through a competitive tendering method (CNT).
- A new method of conducting an electronic tender should be advocated at policy level. Unlike ordinary tenders, the two-stage electronic tendering process, ranks bidders not only by offered price, and also takes into account quality.

## NEW LAW ON PROCUREMENT AND INTERNATIONAL PRACTICE

Firstly, it should be noted that the new legislative package on procurement, which was developed by the State Procurement Agency (in line with EU directives to ensure the fulfilment of the obligations stipulated in the EU-Georgia Association Agreement), has been approved by the Government of Georgia and adopted by the Parliament of Georgia on February 9, 2023. The new law addresses a significant proportion of the above-mentioned problems related to public procurement. The draft law sets the date of entry into force of the main provisions of the new legislation as January 1, 2025, with other specific provisions to be enacted in 2027 and 2029. Before these developments, the priority challenges facing the private sector should be taken into account, awareness about the new law should be raised, and effective communication with all interested parties should be established.

### ➤ BEST PRACTICE

The 2014 EU directives on public procurement allow contracting authorities to use several competitive procurement procedures in the public procurement process to organize open, fair, and transparent tenders, ensuring equal opportunity and treatment for all candidates.

According to the relevant EU directives, the following five main types of competitive procedure are available to contracting authorities:

1. Open procedure
2. Restricted procedure
3. Competitive dialogue
4. Competitive procedure with negotiation and
5. Innovation partnership procedure.

Each procedure is overviewed below, taking into account best practices. According to the study of public procurement procedures by OECD/SIGMA (2016)<sup>25</sup>, an open procedure is suitable for routine, straightforward, and commodity-type purchases. Meanwhile, a restricted procedure is particularly suited to more complex procurements and to non-routine purchases. Elsewhere, the competitive dialogue procedure<sup>26</sup> and competitive procedure with negotiation<sup>27</sup> refer to procedures where the contracting

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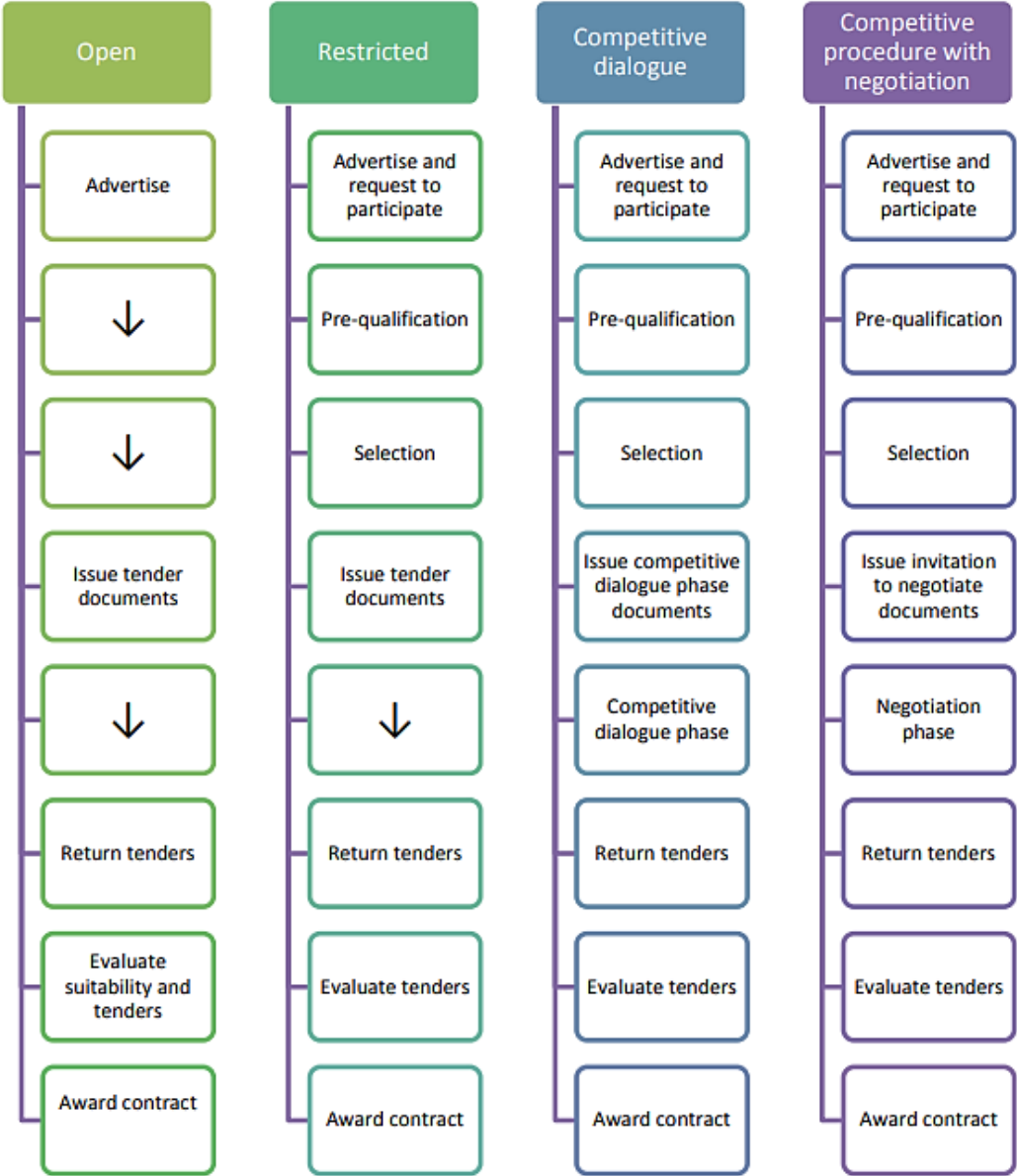
<sup>25</sup> Public Procurement Procedures, Brief 10, Sigma Program, OECD, September 2015.

<sup>26</sup> Example 1: An example of competitive dialogue is provided in the Explanatory Note on Competitive Dialogue (Explanatory Note on Competitive Dialogue in the Classic Sector, European Commission), describing a contracting authority wanting to create a connection between the banks of a river under an infrastructural project. The contracting authority is not certain which solution (a bridge or a tunnel, or something else) would be best suited to its needs. Therefore, the contracting authority applies the procedure of competitive dialogue, discusses possible solutions to meet this specific need with different bidders individually, and makes an informed decision.

<sup>27</sup> Example 2 (provided in the study of public procurement procedures by OECD/SIGMA (2016)): A local authority wishes to award a contract for the construction of a new office building in the center of a town, where it is known that archaeological remains are

authority launches dialogue with the supplier to develop one or more alternative solutions that will meet its requirements. Here, the contracting authority chooses the most suitable offer. As for the innovation partnership procedure, this was established by the 2014 EU Directive. It may be used when a particular need cannot be met by purchasing products, services, or works that are already available on the market and, consequently, a solution involving innovation is required. In general, the innovation partnership procedure is aimed at developing innovative products, services, or works and the subsequent purchase thereof. All procedures (excluding the innovation partnership procedure) are summarized in the chart below:

**Chart 1:** The main competitive procedures aligned with the 2014 EU directives.



Source: Sigma Program, OECD

likely to be found, which will need to be protected during the construction process. The local authority does not know how much risk the economic operators are prepared to take in relation to the impact of protecting the archaeological remains on the cost and timing of construction. To solve this issue, the contracting agency uses the “competitive procedure with negotiation” tool.



The results of the study on international practice showed that the selection of a procurement procedure in accordance with the 2014 EU directives and the assessment of its impact on competition is one of the most important and difficult tasks in the process of state procurement.

As mentioned above, the new draft law on state procurement prepared in accordance with the 2014 EU directive, largely addresses priority challenge 1 identified by the present analysis, and is supposed to enter into force in 2025.

Based on the above judgement, the research team makes the following recommendation:

#### RECOMMENDATION

- The State Procurement Agency should develop a plan of large-scale public-awareness-raising campaign on the new draft law on state procurement, engaging not only contracting organizations but also the private sectors as well as specialist and professional organizations.

#### RULES AND NORMS FOR DEVELOPING PROJECT COST ESTIMATES

As mentioned above, the policy challenge related to estimating project costs can be divided into the following two main directions:

- I. Costing construction materials using the so-called resource method (using quarterly edition "Guide of Prices of Construction Resources" issued by the Union of Construction Appraisers); and
- II. Construction norms and regulations (СНИП -IV-1984), widely used in the construction industry including in project costing.

In the first case, according to the absolute majority of surveyed stakeholders, the cost estimates developed using this method often do not correspond to market prices and, ultimately, the actual cost of the project. This challenge goes beyond the competencies of the State Procurement Agency and contracting organizations, as, for instance, if the contracting organization had procured the project together with its cost estimate (through competition or tender from a design company), the contracting organization is not allowed to make any amendments in the price when conducting a tender in the following phase - the implementation of this project. As the survey revealed, in this matter the contracting organization is under the strict supervision and control of a number of agencies including the Monitoring Department of the State Procurement Agency and the State Audit Office.

The research team suggests that one of the solutions to this challenge would be the creation of a kind of electronic system (which is also in line with the solution proposed by some representative of the private sector) to encourage manufacturers, importers, and distributors to place their goods with corresponding prices at a specific point in time and then periodically update the data.

Survey participants revealed that a similar initiative has been implemented already by the Infrastructure Construction Companies Association (ICCA), which created a beta version of a similar electronic system. However, the research also showed that this type of electronic system is not actively used. Therefore, when implementing such an initiative, it is important to share the experience of the association, and to evaluate and analyze identified barriers.

In addition, a needs assessment of the Union of Construction Appraisers - the organization which developed and published the "Guide of Prices of Construction Resources" - and strengthening its capacities to improve



the current methodology and practices with the involvement of all stakeholders, as well as enhancing its human and operational capacities could be an effective solution.

As for the second case, according to the absolute majority of stakeholders, the norms and standards currently applied in the construction sector are outdated and, therefore, the process of transition to Eurocodes should be facilitated and their application and implementation should be accelerated with the involvement of all interested parties.

Recommendations made by the research team are summarized below:

#### RECOMMENDATIONS

- Support industry and/or professional associations to develop a solution using modern tools (preferably information technologies) allowing manufacturers, importers, or dealers of construction materials to place and update products along with their specifications and prices in electronic form, which will ultimately allow for more qualified/informed cost estimates.
- Support the replacement of outdated construction standards in Georgia with modern EU standards, while accelerating the application and implementation of the mentioned standards in practice through familiarizing all stakeholders (including those in the private sector) with Eurocodes, introducing relevant educational programs, and recognizing and applying Eurocodes at the national level.

*Note: The involvement of the Union of Construction Appraisers - the organization which develops and publishes "Guide of Prices of Construction Resources" – as a stakeholder is recommended when developing a methodology to determine price of construction materials on a quarterly basis.*

#### RULES AND STANDARDS FOR DRAFTING TECHNICAL SPECIFICATIONS FOR STATE TENDERS

As mentioned above, according to the majority of surveyed business actors in the PPE and construction value chains, most tender announcements of contracting organizations do not contain detailed technical specifications for the requested products and are instead limited to describing only general parameters. According to private sector representatives, this creates risks regarding the quality of the product. The main reason behind this challenge was generally cited as a lack of competence on the part of contracting organizations.

Pertinently, neither the primary nor secondary legislation of Georgia on public procurement contains and defines the important concept of market research, which could provide contracting organizations with a basis on which to provide complete and competent specifications. Recommendations of the State Procurement Agency issued on June 30, 2021, reflect the importance of carrying out market research when conducting electronic tenders. These define important methods and directions for contracting organizations, helping them to carry out necessary market research before announcing a specific electronic tender. As revealed during the field research, the State Procurement Agency is considering the possibility of making the mentioned recommendations mandatory for contracting organizations, obliging all such organizations in Georgia to carry out market research before announcing an electronic tender.

The **RESEARCH TEAM RECOMMENDS** to the State Procurement Agency that they make market research (using relevant methodology) obligatory for contracting organizations before announcing an electronic tender via the relevant by-law, as well as expand and strengthen the existing retraining and training programs for contracting organizations to develop the skills of personnel engaged in drafting technical specifications.

The Law of July 19, 2017 (amendments to the Law of Georgia on Public Procurement) introduced the concept of best practice, according to which a contracting organization should give preference to so-called *functional specifications* when preparing tender documentation. When describing a product using functional specifications, the emphasis is placed on desirable final results, and not on the methods used to achieve these results. With this legislative change, the State Procurement Agency to an extent transposed one of the requirements of the Association Agreement and laid the foundations for the application of best international and European practices. However, as in the case of the rule of procurement of design services, contracting organizations usually do not take this opportunity. Crucially, the legislation allows contracting organizations not to use functional specifications when preparing tender documentation. In addition, according to surveyed experts, the use of functional (and results-oriented) specifications, allowing the contracting organization to consider different proposals and alternatives, would lead to a significant increase in the number of potential bidders compared to a situation where standard technical specifications are used, ultimately reducing the procurement cost.

With all of this in mind, the research team issues the following recommendations:

#### RECOMMENDATIONS

- The State Procurement Agency should make market research (using relevant methodology) obligatory for contracting organizations before announcing an electronic tender via the relevant by-law.
- The State Procurement Agency should recommend contracting organizations to provide a full description of functional specifications of procurement items (and use technical specifications only when procurement items cannot be described by functional specifications), in accordance with the current public procurement regulations.
- The State Procurement Agency should expand and strengthen the existing retraining and training programs for contracting organizations to develop skills in drafting technical specifications, including through introducing relevant changes in syllabuses and curricula of trainings carried out at the training center of the State Procurement Agency in order to develop a mandatory training course on functional specifications.

## 4.2. CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION

### **LOW AWARENESS OF ECONOMIC OPERATORS WHEN IT COMES TO QUALITY AND SAFETY REQUIREMENTS, DETERMINED BY THE CORRESPONDING GEORGIAN TECHNICAL REGULATIONS, THAT ARE MANDATORY IN THE PROCESS OF APPROXIMATING WITH EU LEGISLATION.**

After the enactment of Georgian regulations that are in line with EU legislation, regulating placing potentially hazardous consumer, household, industrial, and construction materials (including PPE and construction materials<sup>28</sup>) on the market, relevant economic operators registered in Georgia (namely manufacturers, importers, authorized representatives, and distributors) have had to implement a number

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<sup>28</sup> Resolution No. 476 of the Government of Georgia dated October 1, 2018, on Approval of the Technical Regulations on Construction Materials; and Resolution No. 82 of the Government of Georgia dated February 6, 2020, on Approval of the Technical Regulations on PPE.

of important changes to ensure compliance with the regulations. In particular, the relevant economic operators of the supply chains were forced to import products accompanied by documents confirming their compliance, including a declaration of conformity (a document issued by the manufacturer confirming that the manufactured product meets the requirements of the specified regulation with identification data of the person to have performed the conformity assessment). The Market Surveillance Agency checks the validity of such certificates, examining the traceability of their signatories, accredited persons, and the accreditation process in general.

According to relevant surveyed stakeholders, after the adoption of national regulations, some of the economic operators registered in Georgia have found it difficult to adapt to the mentioned standards. Importers of potentially hazardous products who are unable to provide documents confirming the compliance of their products with EU standards of quality and safety have been identified (due to the unavailability of the manufacturer's certificate of origin). In such cases, the Market Surveillance Agency must suspend the operations of these operators, as documents proving that every effort has been made to ensure the safety of human life and health during production are not available.

However, according to the Market Surveillance Agency, there have been many cases when economic operators in the supply chain had not been informed that their products were potentially hazardous. In such cases, the Market Surveillance Agency must impose restrictions on the sale of these products by the relevant operators.

The survey showed that in the case of PPE, the opinions of interviewed economic operators regarding the PPE product categories differ greatly (e.g., some respondents believe that medical gowns belong to the PPE category, while some respondents lacked relevant information about which products fell under this category).

As PPE belongs to the category of potentially hazardous products, the application of which is intended to prevent one or more risks to human health and life, it should be clearly explained to relevant representatives of the private sector and other stakeholders what type of products fall under PPE and for which producers of similar products this definition is relevant.

Therefore, there is a need to raise the awareness of economic operators dealing with potentially hazardous products on the requirements of the national regulations in the process of being approximated with EU legislation.

The research team's recommendation to address the challenges related to certification, laboratory testing

<p><b>RECOMMENDATION</b></p> <p>➤ Raising the awareness of economic operators (producers, importers, authorized representatives, and distributors) dealing with construction materials and PPE about the requirements of the national regulations being aligned with EU legislation.</p>
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and standardization are summarized below:

**LIMITED ACCESS TO CONFORMITY ASSESSMENT BODIES (CABS)**

One of the main reasons for the limited access to the services of the accredited conformity assessment bodies (CABs) in Georgia, according to the majority of surveyed stakeholders, is the low demand for such

services on the local market. However, prior to searching for ways to strengthen the capacity of CABs and developing their services, the research team recommends studying and evaluating the demand for and supply of the services of CABs in the Georgian market for the PPE and construction materials value chains.

#### RECOMMENDATION

- Studying and evaluating the demand for and supply of the services of conformity assessment bodies (CABs) on the Georgian market.

The research team's recommendations and suggested ways of implementing them are presented below:

#### • RESEARCH THE MARKET DEMAND

The market demand for the services of CABs in the construction materials and PPE value chains should be measured, while a forecast/analysis of how the demand for these services is likely to increase at different stages of harmonization with EU directives would also be beneficial. In particular, a database of the main products made in the construction materials and PPE value chains could be developed and their certification needs could be determined (The following should be undertaken with regard to quality certification of products and management processes).

1. Specify what type of products the company produces and what type of certification is needed to enter the target export or local markets (quality compliance and certification on the local market is determined by the relevant technical regulations); and
2. Determine why a specific certificate is needed for producers:
  - For the Georgian market -
  - For the EU market - where specific certificates are required for specific products; and
  - For countries outside the EU – where country-specific certificates are required.

#### • RESEARCH THE MARKET SUPPLY

1. Market research: existing CABs and the services they provide (both in terms of certification of both product quality and management) should be examined by the following:
  - Accredited testing laboratories, which would test the products and determine relevant parameters<sup>29</sup>; and
  - Certifying bodies that issue certificates based on the protocols for laboratory tests.<sup>30</sup>
2. Research market prices for services: this entails researching the current market prices for CABs' services, both on the local market and for services available abroad (for example, in Turkey), and developing a kind of comparative analysis;
3. Identify gaps and propose recommendations for the development of the mentioned services; and
4. Develop a guide on the basis of information obtained through the research on CABs' services.

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<sup>29</sup> Accreditaion is done according to ISO 17025.

<sup>30</sup> Accreditaion is done according to ISO 17065.

## 5. FOLLOW-UP OF PUBLIC-PRIVATE DIALOGUE AND ACTIVITIES RELATED TO RECOMMENDATIONS

### 5.1. CHALLENGES RELATED TO PUBLIC PROCUREMENT

Following the Parliamentary PPD session, on March 23, 2023, the Sector Economy and Economic Policy Committee of the Parliament of Georgia corresponded with the State Procurement Agency, urging them to take into account the policy recommendations formulated by the research team concerning the advancement of Construction Materials (CM) and Personal Protective Equipment (PPE) value chains. In response, the agency provided a written statement on April 11, 2023, outlining their stance on the aforementioned recommendations:

- **Recommendation:** *The State Procurement Agency should make market research (using relevant methodology) obligatory for contracting organizations before announcing an electronic tender via the relevant by-law.*

The agency's letter states the following:

- On the approval of the reporting rules for the purchasing organization, the Clause 6 of Article 4 of Chairman's Order No. 2 ("Annual Plan for State Procurement") of the Chairman of the Procurement Agency, dated February 10, 2011, that outlines the preparatory tasks undertaken by the procurement organization prior to commencing each procurement implementation procedure as per the annual plan. These tasks encompass defining the procurement object's characteristics, estimating the cost to provide clarity, determining the means of procurement execution, and identifying the financing amount.
- The agency's letter also references the first paragraph of Article 46 of the new "Law of Georgia on Public Procurement," which stipulates the procuring organization to conduct market research as part of the preparation for public procurement. Furthermore, paragraph 3 of the same article specifies that the procedure for conducting market research is established by the chairman of the agency through an order.

According to the agency's position, the market research component will be envisaged not only through the appropriate methodology but also through a subordinate normative act, until the completion of the process of developing new secondary legislation, which is expected to conclude by the end of 2024.

- **Recommendation:** *The State Procurement Agency should recommend contracting organizations to provide a full description of functional specifications of procurement items (and use technical specifications only when procurement items cannot be described by functional specifications), in accordance with the current public procurement regulations.*

The agency's stance regarding the mentioned recommendation is that both the current and new laws of Georgia "On Public Procurement" endorse the approach of prioritizing functional specifications. Specifically, paragraph 5 of Article 49 in the new law outlines different methods for formulating specifications, including performance specifications and/or functional specifications. Additionally, according to paragraph 6 of the same article, emphasis should be placed on providing a general description of performance and functional specifications.

- **Recommendation:** *A legislative amendment or a new law on the procedures for procurement of design, cost-estimating, consulting, and similar services should be adopted, ensuring that the procurement of the mentioned services is only done through a competitive tendering method (CNT).*

In line with the agency's viewpoint on the mentioned recommendation, the authority for procurement through competition (CNT) lies with the procuring organization, encompassing the procurement of services specified in the recommendation. The Agency's response underlines Directive 2014/24/EU of the European Parliament and the Council, dated February 26, 2014, under Article 2, paragraph 21, that defines competition (CNT) as a procedure that enables the procuring organization to acquire urban and settlement planning, architectural and engineering concepts, or data processing, as well as design or planning services.

According to information provided by the agency, the first paragraph of Article 31 of the Law of Georgia aligns with the aforementioned provision of the European Directive. This article states that competition (CNT) is a public procurement procedure through which the procuring organization can procure plans or designs, including those related to city and other settlement planning, architectural and engineering services, or in the field of data processing. Furthermore, Clause 4 of Article 26 in the same law grants the procuring organization the discretion to choose a public procurement procedure, as long as it complies with the requirements of the law, unless a specific public procurement procedure is mandatory.

Projects, activities and processes related to other recommendations presented in the policy document are described below:

- **Recommendation:** *Support industry and/or professional associations to develop a solution using modern tools (preferably information technologies) allowing manufacturers, importers, or dealers of construction materials to place and update products along with their specifications and prices in electronic form, which will ultimately allow for more qualified/informed cost estimates.*

Closely related to this recommendation is the project, implemented by the Infrastructure Construction Companies Association (ICCA), that aims to support the effective implementation of the public procurement reform in Georgia by executing special (sector-oriented) actions focused on identifying/advocating proper cost estimation regulation(methodology) and construction price adjustment regulation (schemes, mechanism).

- **Recommendation:** *Support the replacement of outdated construction standards in Georgia with modern EU standards, while accelerating the application and implementation of the mentioned standards in practice through familiarizing all stakeholders (including those in the private sector) with Eurocodes, introducing relevant educational programs, and recognizing and applying Eurocodes at the national level.*

Closely addressing to the aforementioned recommendation is the project – ‘Support in adaptation of Eurocodes through learning programs for young professionals’ - implemented by the Infrastructure Construction Companies Association (ICCA), with the support of the USAID Economic Governance Program and the involvement of the Ministry of Economy and Sustainable Development of Georgia. The project aims to support the construction sector and educational institutions in the development of institutional capacity for students and professional designers/engineers for education in Eurocodes. The project envisages the development of training programs as well as the conduct of an advocacy campaign to facilitate transition processes from the post-Soviet standards system to modern European Eurocodes.

## 5.2. CHALLENGES RELATED TO CERTIFICATION, LABORATORY TESTING, AND STANDARDIZATION

- **Recommendation:** *Studying and evaluating the demand for and supply of the services of conformity assessment bodies (CABs) on the Georgian market.*

It is worth noting that at the end of 2022, the German Institute of Metrology (Physikalisch-Technische Bundesanstalt - PTB) started the implementation of a new 3-year project "Quality standards for increased trade in Eastern Partnership countries". The main objective of the project is to support quality infrastructure institutions to adapt their activities and processes to best European practices to increase productivity, encourage innovative approaches and promote the creation of added value.

One of the main goals of the mentioned project is to establish cooperation between local quality infrastructure institutions, the private sector and decision-makers at the political level. Facilitating the cooperation of quality infrastructure institutions (providers of local services) and representatives of the relevant private sector (recipients of said services) partially echoes the top recommendation proposed by the research group.

## 6. ANNEXES

### ANNEX 1. LIST OF CONDUCTED INTERVIEWS

#	ORGANIZATION		RESPONDENT
<b>PUBLIC SECTOR</b>			
1	The Sector Economy and Economic Policy Committee of the Parliament of Georgia		Davit Songulashvili, Chairman
2	The Sector Economy and Economic Policy Committee of the Parliament of Georgia		Tamila Shabashvili, Chief of Staff
3	MoESD Construction Policy Department		Tatia Berikashvili, Deputy Head
4	MoESD, LEPL Market Supervision Agency		Rati Oboladze, Head
5	Skills Agency		Davit Rakviashvili, Nino Kakulia
6	Enterprise Georgia		Tornike Zirakishvili, Deputy Director
7	State Procurement Agency		Kakha Demetrashvili, Deputy Chairman
<b>DONOR ORGANIZATIONS</b>			
8	Clusters4Development, GIZ		Salome Argvliani
9	USAID Economic Governance Program		Tamar Buadze, Lika Akhobadze
<b>ASSOCIATIONS AND CLUSTERS</b>			
10	Local Expert, Georgian Construction Materials Cluster (GCMC)		Lika Kardava
11	Georgian Cement Association		Irakli Makharoblidze, Irakli Giorgadze
12	Infrastructure Construction Companies Association		Ana Sabakhtarashvili, Executive Director
<b>PRIVATE SECTOR COMPANIES</b>			
13	Construction Materials	Heidelberg Georgia	Irakli Makharoblidze
14		Knauf Georgia	Giorgi Japaridze
15		Domus Aluminum	Giorgi Giorgadze
16		Geocapitals	Salome Khorava
17		Euroblock	Murad Tskrialashvili
18		Ultragranit 16	Giorgi Kvariantishvili
19		MKD Builder	Mikheil Durglishvili
20		Builder 2019	Ketino Liluashvili
21		Kamara	Kakha Bikashvili
22		Basalt Fibers	Iveri Kuchnashvili
23		Smarter	Dimitri Abuladze
24		Akustiko	Avtandil Kaveishvili
25		UBG	Roman Badalian
26		Dio	Tamaz Daushvili
27		MEGADOORS	Rauli Gabaidze



28	Personal Protective Equipment	Doctor Goods	Mamuka Khaduri
29		Elven Technology	Vamekh Shrekeulidze
30		Fashion House Materia	Maya Gogiberidze
31		Ata	Ekaterine Chkheidze
32		Medstyle	Irakli Gelashvili
33		Elselema	Elguja Mamashlisi
34		GL Style	Luara Gvaladze
35		Unistyle	Natalia Chkheidze
36		Anabechdi	Giorgi Barnabishvili
37		Grixon	Mikheil Berdzenishvili
<b>OTHER</b>			
38	Expert (Government Procurement)	Alexandre Chkhikvishvili	

## ANNEX 2: WORKING GROUP PARTICIPANTS

#	NAME	POSITION	ORGANIZATION
1	Irine Tsukhishvili	Committee Staff	Parliament of Georgia, Sector Economy and Economic Policy Committee
2	Mariam Begoidze	Strategic Development Specialist	Ministry of Economy and Sustainable Development of Georgia (MoESD)
3	Thea Kunchulia	Deputy Head	MoESD Foreign Trade Policy Department
4	Gabriel Beradze	Main Specialist	MoESD Market Surveillance Agency
5	Rati Oboladze	Head	MoESD Market Surveillance Agency
6	Nika Pilpani	Head of Consumer Products Surveillance Department	MoESD Market Surveillance Agency
7	Giorgi Darchiashvili	N/A	MoESD Market Surveillance Agency
8	Tatia Berekashvili	Deputy Head	MoESD Construction Policy Department
9	Nika Mamukelashvili	Head of Export Department	MoESD Enterprise Georgia
10	Tatia Bidzinashvili	Program Manager	MoESD Enterprise Georgia
11	Salome Argviani	Programme Expert for Cluster Development / Apparel and Construction	Cluster4Development Project, GIZ
12	Ana Mshvildadze	Junior Expert	Georgian Apparel and Fashion Association
13	Lika Akhobadze	Regulatory Advisor	USAID Economic Governance Program
14	Irma Topuria	Junior Expert	Georgian Construction Materials Cluster
15	Mariam Tsaishvili	Manager, Senior Expert	Georgian Construction Materials Cluster
16	Irakli Makharobidze	Director of Sales and Marketing	HeidelbergCement Caucasus   Georgian Cement Association
17	Irakli Giorgadze	Quality Assurance Manager	Georgian Cement Association
18	Giga Phaikidze	CEO	The SME Development Association (SMEDA)
19	Salome Sulakvelidze	Lawyer	Infrastructure Construction Companies' Association (ICCA)
20	Iveri Kutsnashvili	General Director	Basalt Fibers / Rebas
21	Dimitri Abuladze	Partner	Smarter
22	Tamaz Daushvili	Executive Director	Dio
23	Avtandil Kraveishvili	Founder, Director	Akustiko
24	Raul Gabaidze	Partner/Owner	MEGADOORS
25	Marika Gabaidze	N/A	MEGADOORS
26	Roman Badalyan	Owner	Ltd Universe Business Group (UBG)
27	Maia Gogiberidze	CEO	Materiel Tbilisi
28	Irakli Gelashvili	Founder	Medstyle
29	Mamuka Khaduri	Founder	Doctor Goods LLC
30	Giorgi Abashidze	Consultant	PMCG
31	Eka Gvinjilia	Project Manager	PMCG
32	Mariam Khubashvili	Project Manager	PMCG
33	Ketevan Babiashvili	Consultant	PMCG
34	George Darchia (Online)	Component Lead	USAID Economic Security Program
35	Natia Katsiashvili	BEE Specialist	USAID Economic Security Program
36	Mariam Latsabidze	Communications	USAID Economic Security Program

### ANNEX 3: ECONOMIC ACTIVITY CLASSIFIER (NACE REV.2) CODES FOR THE CONSTRUCTION MATERIALS VALUE CHAIN

NACE CODE	DESCRIPTION OF ECONOMIC ACTIVITY
16.2	Production of wood, cork, straw and textile products
23.1	Production of glass and glass products
23.3	Production of clay building materials
23.6	Production of concrete, cement and plaster products
23.7	Stone cutting, shaping and finishing
25.11	Production of metal structures and parts of structures
25.12	Production of metal doors and windows

#### APPENDIX 4: RESULTS OF AN ANONYMOUS SURVEY CONDUCTED WITH THE WORKING GROUP

PRIORITY CHALLENGES TOTAL	SCORE	PRIORITY CHALLENGES PRIVATE SECTOR	SCORE	PRIORITY CHALLENGES PUBLIC SECTOR	SCORE	PRIORITY CHALLENGES DONORS	SCORE
Challenges related to public procurement	208	Challenges related to certification, laboratory testing, and standardization	106	Challenges related to public procurement	43	Lack of innovations and innovative skills	67
Challenges related to certification, laboratory testing, and standardization	202	Challenges related to public procurement	99	Challenges of certification, laboratory testing, and standardization	43	Challenges related to public procurement	66
Barriers to entering global export markets	196	Barriers to entering global export markets	95	Lack of skilled labor	41	Barriers to entering global export markets	63
Lack of innovations and innovative skills	196	Lack of innovations and innovative skills	89	Lack of innovations and innovative skills	40	Challenges related to business disputes	61
Challenges related to business disputes	185	Challenges related to business disputes	89	Barriers to entering global export markets	38	Lack of skilled labor	61
Lack of skilled labor	180	Lack of skilled labor	78	Challenges related to business disputes	35	Inefficient waste management of construction materials	58
Inefficient waste management of construction materials	161	Inefficient waste management of construction materials	68	Inefficient waste management of construction materials	35	Challenges related to certification, laboratory testing, and standardization	53

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