GREEN Action Task Force

Sustainable Infrastructure Development for a Low-Carbon Transition in Central Asia and the Caucasus: Mapping of Potentially High-impact Infrastructure Projects and Needs Assessment

Strategic Infrastructure Planning for Sustainable Development in Georgia

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3. Strategic infrastructure planning for sustainable development in Georgia

Overview

Georgia is a lower-middle income country in the south Caucasus. With the most favourable investment climate in the region, it has become an attractive destination for foreign investment. Significant structural reforms have been carried out to simplify business procedures, construction permits, licencing and permitting regimes, as well as to improve tax and customs procedures. In 2019, Georgia ranked 6th in the World Bank’s Ease of Doing Business Indicators, up from 115th in 2005. Georgia attracts investment from many different countries and in all sectors of the economy, from financial services to coal, oil and gas and renewable energy. Yet, little FDI is directed towards infrastructure projects.

Georgia’s existing infrastructure varies in quality, with relatively high-quality electricity infrastructure, mainly based on hydropower (more than 80%), and lower-quality transport and water infrastructure. Improving connectivity to foreign markets through both hard infrastructure (e.g. transport links) and soft infrastructure (e.g. institutions) is a priority to boost Georgia’s productivity, and is reflected in the list of planned transport projects that intend to create new corridors connecting Georgia by road and rail to neighbouring countries. However, currently planned energy projects do not necessarily align with the government’s overall objectives to diversify the country’s electricity generation mix, as hydropower still represents more than 80% of planned energy projects. Continued near-exclusive reliance on hydroelectricity could create energy security concerns in the long term, as Georgia’s water resources are particularly vulnerable to a changing climate.

In this context, the lack of long-term strategic documents in Georgia is of significant concern. Georgia’s planning documents only extend to 2020 and do not contain quantitative, time-bound targets nor do they delegate responsibility for progress on government priorities. The absence of a national energy strategy and supporting policies makes it difficult to assess energy projects’ compatibility with national supply and demand trends as well as energy security concerns and long-term environmental objectives. While the country’s policy environment has become conducive to investment, institutional capacity of government bodies has not kept pace with improvements. Such capacity is necessary to analyse risks effectively and develop, screen and implement infrastructure projects.
3.1. State of play: economy, investment and climate change in Georgia

**Economy and trade**

Table 3.1. Key indicators on Georgia’s economy

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2018)</td>
<td>3,731,000</td>
</tr>
<tr>
<td>Urbanisation rate (2018)</td>
<td>58.6%</td>
</tr>
<tr>
<td>Annual population growth (2018)</td>
<td>0.08%</td>
</tr>
<tr>
<td>Surface area</td>
<td>69,700 km²</td>
</tr>
<tr>
<td>GDP (USD, current price, 2018)</td>
<td>16,210 million</td>
</tr>
<tr>
<td>GDP per capita (USD, current price, 2018)</td>
<td>4,345</td>
</tr>
<tr>
<td>Real GDP growth (year-on-year change, 2019)</td>
<td>4.6%</td>
</tr>
<tr>
<td>Inflation (average consumer price, y-o-y change, 2017)</td>
<td>6.0%</td>
</tr>
<tr>
<td>Exports of goods and services (% of GDP, 2018)</td>
<td>55.1%</td>
</tr>
<tr>
<td>Imports of goods and services (% of GDP, 2018)</td>
<td>66.7%</td>
</tr>
<tr>
<td>FDI, net inflows (% of GDP, 2018)</td>
<td>7.3%</td>
</tr>
<tr>
<td>General government net lending/borrowing (% of GDP, 2019)</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Unemployment (% of total labour force, 2018)</td>
<td>14.1%</td>
</tr>
<tr>
<td>Remittances (% of GDP, 2018)</td>
<td>12.6%</td>
</tr>
<tr>
<td>Transparency, accountability and corruption in the public sector rating (1= most corrupt, 6= least corrupt, 2013)</td>
<td>3.5</td>
</tr>
</tbody>
</table>


**Economy and demographics**

Georgia is a lower-middle income country in the Caucasus. Its population, the second smallest in the present study’s sample after Mongolia, shrank dramatically from 4.9 million in 1993 to 3.7 million in 2013 but has since stabilised. After two decades of nearly uninterrupted negative population growth, growth turned positive in 2014 (at 0.05%). Since then, Georgia’s population growth rate has remained the slowest among the countries in Central Asia and the Caucasus (0.06% in 2016, 0.01% in 2017 and 0.08% in 2018).

The Georgian economy initially followed a similar trajectory to its population immediately after the breakup of the Soviet Union, falling from USD 7.8 billion in 1990 to USD 2.5 billion in 1994. It then recovered over the next two decades to USD 16.2 billion in 2018.

Georgia’s government only has effective control over about 80% of its internationally recognised territory (Ellyatt, 2019). Two regions, Abkhazia in the northwest and South Ossetia in the north, declared themselves independent republics and, receiving support from neighbouring Russia, gained control of their claimed territories through a series of armed conflicts beginning right after independence (1991-1992 in South Ossetia, 1992-1993 in South Ossetia) and culminating in the Russo-Georgian War of 2008. Only a few UN member countries (the Russian Federation, Nicaragua, Venezuela, Nauru and Syria) recognise the independence of the two breakaway regions, while the rest of the world recognises them as integral parts of Georgia.
Georgia has the most service sector-oriented economy in the region, along with Kazakhstan. Services accounted for 57.6% of GDP in 2017, compared to 22.6% for industry and construction and only 6.9% for agriculture (World Bank, 2019[1]).

Trade

Georgia has been a member of the World Trade Organisation since 2000 and has close ties with the European Union, being a target country of the European Union’s European Neighbourhood Policy under the Eastern Partnership (EaP) policy initiative. These initiatives aim to deepen EU-Georgia relations through actions focusing on economic development, governance, connectivity and people-to-people contact (European Commission, 2019[4]). In 2014, Georgia and the European Union signed an Association Agreement and established a Deep and Comprehensive Free Trade Area (DCFTA) (European Commission, 2017[5]).

Georgia exports a more diversified array of products than most countries in the region (see Figure 3.1(c)). Its most important export categories by value are mineral products (primarily copper ore, which accounts for 16% of total exports), foodstuffs (particularly wine, hard liquor and water, accounting for 5.4%, 3.7% and 3% respectively), metals (mostly ferroalloys, 9.9%), chemical products and transportation (cars, 6.1%). Georgia’s imports are even more diverse (see Figure 3.1(d)). Georgia’s imports of fuels (refined petroleum and petroleum gas account for 8.7% and 4.3% of imports respectively) explain the comparatively large share of mineral products in the country’s import mix.

Georgia is less reliant on individual trading partners than most countries in the region (see Figure 3.1(a) and (b)). Most of its largest export and import markets are its geographical neighbours, especially Russia (13% of exports, 10% of imports), Turkey (7% of exports, 17% of imports) and Azerbaijan (8% of exports, 7% of imports), and, to a lesser extent, Armenia (5% of exports, 3% of imports) and Ukraine (3% of exports, 6% of imports). Although individual European countries account for only small shares of Georgia’s trade, as a bloc, the European Union makes up 28% of both exports and imports. Bulgaria is Georgia’s most important EU export destination (10%), while Germany is its most important import origin country (5%). Beyond the EU and its direct neighbours, Georgia also maintains important trading relationships with the People’s Republic of China (7% of exports, 9% of imports) and the United States (4.5% of exports, 2.6% of imports).
**Figure 3.1. Trade of Georgia**

(a) Export destinations (2017)

![Diagram showing export destinations (2017)]

(b) Import origins (2017)

![Diagram showing import origins (2017)]

(c) Exports by category (2017)

![Diagram showing exports by category (2017)]

(d) Imports by category (2017)

![Diagram showing imports by category (2017)]


**Investment climate**

Georgia has one of the most favourable investment climates in the region, making it an attractive destination for investment. Significant structural reforms have been carried out to simplify business procedures, construction permits, cut red tape, simplify licencing and permitting regimes, as well as to improve tax and customs procedures. Such reforms have not only led to an approximation to EU legislation, but also to a significant improvement in the World Bank Doing Business Indicators. In 2019, Georgia was ranked 6th worldwide, up from 115th in 2005, ranking higher than the United States or the United Kingdom (IBRD, 2019[7]).

The legal basis for regulating domestic and foreign investments is provided by two laws, namely the “Law of Georgia on Promotion and Guarantees of Investment Activity” and the “Law on State Support of Investments” (Government of Georgia, 2006[8]). An investment
promotion agency, the Georgian National Investment Agency, has also been established in 2002 to facilitate the investment process by assisting investors in obtaining the required licences and permits, as well as to represent investors at other governmental agencies during licencing and permitting procedures (Grant Thornton, 2018[9]). An online portal, Invest in Georgia (n.d.[10]), has also been put in place to promote and support potential FDI projects in the country in the area of energy, hospitality and real estate, manufacturing, logistics hubs, agriculture and food processing and business process outsourcing.

Despite such a favourable investment climate, a large part of the economy is still dominated by low-value industries. According to the EBRD, Georgia is below its innovation potential (EBRD, 2016[11]). For example, at the company level, innovation remains low and technology infrastructure such as broadband and ICT platforms need to be expanded and improved. Further areas of improvement include restructuring the market for land, providing better frameworks for firm exit and restructuring (IBRD, IFC and MIGA, 2018[12]), as well as improving the corporate governance standards for manufacturing and services (EBRD, 2016[11]).

The European Union is an important source of FDI in Georgia. Collectively it invested a total of USD 6.6 billion between 2006 and 2017, which amounts to over 40% of total net FDI in Georgia over that period. Austria, which contributed over 25% of total FDI, and, to a lesser extent, Poland, Denmark and Malta have been Georgia’s most important EU investors (see Figure 3.2). Over the past decade, former Soviet Union countries – particularly Armenia, Azerbaijan and Belarus – have also been important sources of foreign investment, accounting for 13%, 6% and 9% respectively. Beyond these two blocs, Georgia’s most important investors are Turkey (5%) and the United States (4%). China and Russia, both of which are major investors in other countries in the region, play a smaller role in Georgia, each accounting for just over 3% of FDI in Georgia.

Georgia’s public debt was equal to 44.9% of GDP in 2017 and is projected to fall slightly to 43.5% by 2019. Following its third review under the Extended Fund Facility Arrangement, the IMF (2018[13]) assessed Georgia’s debt situation as relatively low risk.

**Figure 3.2. FDI in Georgia by source country, 2006-2017**

In USD thousands
Georgia has attracted around USD 16.9 billion of announced cross-border greenfield FDI projects between 2003 and 2017, more than Turkmenistan or Mongolia, but significantly less than Azerbaijan and Kazakhstan. Yet, compared to other countries in the region, FDI is more diversified, with no sector that dominates the landscape. Around 19% of FDI goes into financial services, followed by coal, oil and natural gas (12%), and alternative and renewable energy (11%). Infrastructure-related investments have been rather limited. For instance, transportation receives around 7% of total greenfield FDI, or around USD 1.2 billion, while building and construction materials received only around USD 500 million of the total announced greenfield FDI projects in Georgia (Figure 3.3).

Figure 3.3. Greenfield FDI in Georgia by economic activity, 2003-2017

Cumulated greenfield FDI capital between January 2003 and September 2017 in USD million

Note: Other includes ceramics and glass, business service, aerospace, business machines and equipment, chemicals, consumer products, rubber, software and IT services, industrial machinery, equipment and tools, automotive components, automotive OEM, pharmaceuticals, healthcare, electronic components, and plastics.

Climate change

Georgia has a relatively low rate of greenhouse gas (GHG) emissions, only being responsible for 0.027% of total global emissions in 2012. Georgia’s per capita emissions were a mere 3.8 tCO₂e in 2012, much lower than its 1990 levels of 8.0 tCO₂e, and are among the lowest in Central Asia and the Caucasus (only Tajikistan and the Kyrgyz Republic have lower per capita emissions in the present study). They only amount to about a third of the OECD average (12.9 tCO₂e per capita in 2012).
In the years following the breakup of the Soviet Union, Georgia’s annual GHG emissions plummeted to about a quarter of their pre-independence levels, from 38 221 ktCO\(_2\)e in 1990 to 9 788 ktCO\(_2\)e in 2001. While the country’s economic situation initially followed a similar trend in the early 1990s, Georgia’s GDP has since recovered to levels close to its Soviet-era peak while GHG emissions have increased only slightly over the past decade (see Figure 3.4). As a result, the GHG intensity of Georgia’s economy (GHG emissions per unit of GDP) halved, from 2.3 kgCO\(_2\)e per USD (constant 2010 dollars) in 1990 to 1.1 kgCO\(_2\)e per USD by 2012. Compared to Central Asia where emissions intensities range from twice to almost four times higher, the Georgian economy is not particularly emissions intensive, but it still emits almost three times as much GHG per unit of GDP as the OECD average (0.35 kgCO\(_2\)e per USD in 2012) (World Bank, 2019\(^{[1]}\)).

Figure 3.4. GHG emissions and GDP of Georgia, 1990-2017

Energy (including fuel combustion for transport) accounts for the majority of Georgia’s GHG emissions, at 54.7% in 2011. This share has shrunk dramatically compared to 1990 when the energy sector was responsible for 77.5% of emissions. Industrial processes (22.7%), agriculture (15.2%) and waste (8%) were responsible for the rest of Georgia’s emissions in 2011 (Government of Georgia, 2015\(^{[16]}\)).

Current trends of climate change impacts, such as increasing temperatures, eroding soils and intensifying droughts and hail, are expected to reduce yields in major agricultural regions, such as the eastern region of Kakheti. The incidence of destructive natural disasters such as landslides and mudflows has increased considerably. There were fewer than 10 000 landslide events in Georgia in 1972, but this number has increased to over 50 000 in 2013 (Government of Georgia, 2015\(^{[16]}\)).

3.2. Georgia’s infrastructure needs and current plans

Georgia’s existing infrastructure varies in quality, with relatively high-quality electricity infrastructure and lower-quality transport and water infrastructure (World Trade Organisation, 2015[17]) (see Figure 3.5). The World Bank (2018[18]) identified improving connectivity to foreign markets through both hard infrastructure (e.g. transport links) and soft infrastructure (e.g. institutions) as a priority to boost Georgia’s productivity. It also highlighted the importance of preserving Georgia’s unique environment, which it calls “one of its greatest economic assets”. Georgia’s low rank in the Logistics Performance Index (119th out of 160 countries) reflects the shortcomings of Georgia’s transportation infrastructure. Although international connectivity has improved in recent years, domestic connectivity remains a barrier to integration into global value chains (World Bank, 2018[18]).

Figure 3.5. Quality of infrastructure in Georgia


The energy sector in particular dominates Georgia’s extensive infrastructure plans. Out of the USD 36.6 billion of investments tracked, energy projects account for over 52% (USD 18.9 billion) of projects while transport projects make up 45% with USD 16.4 billion. Finally, water projects only account for 3% (USD 1.2 billion) of investment projects planned and under construction. The energy investments are divided into electricity generation projects accounting of 36% of total investments (or USD 13.2 billion) and oil and gas pipelines (12% or USD 4.5 billion). Investments in electric power transmission and distribution projects and upstream oil and gas account for 2.4% and 1.9% respectively (see Figure 3.6).
Figure 3.6. Infrastructure projects in Georgia by sector

Planned and under construction

In USD million

 recognised its transport infrastructure’s shortcoming, Georgia has increased investment in overland transport infrastructure measured in per capita terms. On average, it invested USD 110 per capita annually between 2007 and 2016, while neighbouring Armenia invested only USD 31 and considerably richer Azerbaijan invested USD 96. Transport investment spending remains slightly lower than in Turkey (USD 114) and significantly lower than in the Russian Federation (USD 146) (ITF, 2019[29]). The modal share of investments between road and rail has fluctuated somewhat cyclically (see Figure 3.7), but the road sector has received the larger share of investment in most years (except 2007, 2011 and 2012).
Georgia’s inland transport modal split for freight has shifted towards road over time. In 2005, 91% of the country’s freight, measured in tonne-kilometres, moved by rail, but by 2016 rail’s share had dropped to 84% (3.4 billion tkm) while road’s had risen to 16% (0.7 billion tkm). 47% of the rail freight by volume passing through Georgia only transits through the country, while imports (25%), exports (10%) and local freight account for the rest (18%) (UNESCAP, 2018[21]). For passengers, the modal shares are reversed: 93% of passenger transport (6.9 billion pkm) occurred by road, compared to only 7% (0.5 billion pkm) by rail (UNECE, 2018[22]).

Georgia has international rail links to Armenia, Azerbaijan and Turkey. Although a railway line has historically existed between Georgia and the Russian Federation, it passes through the breakaway region of Abkhazia, and due to the frozen conflict, train service has been suspended. Its rail company, Georgian Railways, which is the largest employer in the country, owns rail infrastructure and operates all cargo and passenger service in the country. Georgian Railways is in the process of separating its ownership and operation roles to improve transparency and efficiency, and aims to have done so by 2022 (Benmaamar, Keou and Saslavsky, 2015[23]). The Georgian Partnership Fund (a state-owned investment fund that owns several strategically important companies in the transport and energy sectors) is the company’s only shareholder (Georgian Railway, n.d.[24]). The main barrier to rail transport in Georgia is a lack of available, quality rolling stock, particularly platform cars (Benmaamar, Keou and Saslavsky, 2015[23]).
In the road sector, the government plans to develop and improve sub-regional multi-corridors to offer alternative routes between South Caucasus countries and Turkey (ADB, n.d.[25]). Such corridors include the improvement of two corridors: one running east-west between the capital Tbilisi and Turkey via the Autonomous Republic of Adjara (where Georgia’s second-largest city Batumi is located) and another north-south corridor from the Russian Federation through Georgia to Armenia. Due to the frozen conflicts in Abkhazia and South Ossetia, the only open border crossing between Georgia and the Russian Federation is at Larsi, just north of Stepantsminda on the S3 highway (the “Georgian Military Road”). While international road links are relatively good, secondary and local roads need upgrading to improve domestic connectivity (World Bank, 2018[18]).

Georgia has several ports along the Black Sea coast, but its international maritime connections are weak. According to the Liner Shipping Connectivity Index, which rates a country’s integration into global liner shipping networks on a scale from 0 to 100 (equal to China’s connectivity in 2004), Georgia received a score of just 6 in 2017. By comparison, Ukraine and the Russian Federation had scores of 76 and 36 respectively (UNCTAD, 2017[26]).

Given its strategic position between the Black and Caspian Seas and near large markets such as Turkey, Iran, Europe and Russia, Georgia partakes in several international connectivity initiatives. Georgia is a key component of the EU initiative TRACECA (Transport Corridor Europe-Caucasus-Asia), with two key ports on the Black Sea (Poti and Batumi) and well-established rail and road links to the Caspian Sea via Azerbaijan (TRACECA, 2018[27]). CAREC Corridor 2 also passes through Georgia, linking Caspian Sea ports via Azerbaijan and Georgia to Turkey and the Black Sea (ADB, 2017[28]). Other initiatives include the Middle Corridor Trans-Caspian International Transport Route (along with Azerbaijan and Kazakhstan) (TITR, 2019[29]) and the South-West Transport Corridor (along with Azerbaijan and Iran) (Financial Tribune, 2017[30]).

Georgia’s planned and current transport infrastructure projects account for around USD 16.4 billion, and consist primarily of roads projects (59% or around USD 7.4 billion) (see Figure 3.8). Although at a much lower level, investments in the ports sector come second at around USD 2.5 billion (or 18%), followed by investments in railways (15% or USD 2.1 billion). There are also large scale, cross-border investments covering both roads and railways for a total of USD 2 billion. Intermodal projects have also received some investments, but the amounts have been very limited, reaching only 1% (or USD 83 million). Most of these projects are regional projects aimed at improving Georgia’s connectivity with neighbouring countries and are in line with Georgia’s aim to become a regional hub for transportation and logistics.
Georgia’s transport projects mainly focus on improving the domestic transport network and creating new corridors connecting Georgia by road and railroad with neighbouring countries (Table 3.2). This includes the Georgia Road Corridor Investment Programme, which aims to rehabilitate the domestic transport network and create a sub-regional network that would facilitate trade across the country and with international markets. Another high-impact project is the East-West Highway Corridor (EWHC), where the country is involved in the construction of different sections. The project is a priority of the government’s 2014 Action Plan, and carries over 60% of the country’s international trade. Improved connectivity and access to global markets as well as to increase revenue from freight transit and logistics are considered essential for Georgia’s further integration into the global economy. The project is also aligned with the EU Association Agreement and will play a crucial role in reducing poverty and vulnerability in rural and remote areas by connecting people with services, and jobs, export markets and other opportunities (IBRD, IFC and MIGA, 2018[12]). Such projects aimed at developing multi-corridors at the sub-regional level are in line with the government’s objective to make the economy a transit hub for the Caucasus and Euro-Asian road transport, thereby stimulating Europe-Asia trade links (ADB, n.d.[25]).

### Table 3.2. Hotspot projects in the transport sector in Georgia

<table>
<thead>
<tr>
<th>(a) Under construction</th>
<th>Sub-sector</th>
<th>Description</th>
<th>Project value (USD million)</th>
<th>Funding source</th>
<th>Type of investment</th>
</tr>
</thead>
</table>

*Note: Roads and railways include a large-scale project between Afghanistan, Turkmenistan, Azerbaijan, Georgia and Turkey that involves the construction of both rails and roads. Intermodal projects include the construction of logistics centres.*

<table>
<thead>
<tr>
<th>Road Corridor Investment Program</th>
<th>Road</th>
<th>Description</th>
<th>Project value (USD million)</th>
<th>Funding source</th>
<th>Type of investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>East-West Highway (E60 Tbilisi-Senaki-Leselidze): Section Chumateleti - Argveta</td>
<td>Roads</td>
<td>Construction of 60 km of road on the East-West highway. The project is of regional significance as it is the main corridor for transit through Georgia. A feasibility study was completed in 2014 and the implementation is planned for 2017-2020.</td>
<td>820</td>
<td>Ministry of Regional Development and Infrastructure of Georgia with financial support from multi-donors (unspecified)</td>
<td>Brownfield</td>
</tr>
<tr>
<td>Marabda-Kartsakhi Railway (Construction and Rehabilitation)</td>
<td>Railways</td>
<td>First railway bridge to be constructed in Georgia after the collapse of the Soviet Union. Kartsakhi will be connected to Turkey by the tunnel with 4.4 km length.</td>
<td>775</td>
<td>State Oil Fund of Azerbaijan (SOFAZ)</td>
<td>Brownfield; Greenfield</td>
</tr>
<tr>
<td>Baku-Tbilisi-Kars new railway line</td>
<td>Railway</td>
<td>Rehabilitation and construction of a 154 km railway between Marabda and Akhalkalaki and the construction of a new 25 km railway between Akhalkalaki and Kartsakhi, by the Turkish border. The project will provide a new corridor connecting Georgia with Azerbaijan and Turkey.</td>
<td>775</td>
<td>Not specified</td>
<td>Greenfield; Brownfield</td>
</tr>
<tr>
<td>East-West Highway (Khevi-Ubisa Section) Improvement Project</td>
<td>Roads</td>
<td>Construction of a 12 km road network between Khevi and Ubisa along the East-West Highway. The result is improved efficiency and safety of road transport along the East-West highway.</td>
<td>570</td>
<td>ADB; Japan International Cooperation Agency; World Bank; European Investment Bank</td>
<td>Brownfield</td>
</tr>
</tbody>
</table>

(b) Planned

<table>
<thead>
<tr>
<th>Name</th>
<th>Sub-sector</th>
<th>Description</th>
<th>Project value (USD million)</th>
<th>Funding source</th>
<th>Type of investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaklia Deep Sea Port</td>
<td>Port</td>
<td>Development of a port in Anaklia, Samegreo-Zemo Saneti Region, Western Georgia, on the Black Sea coast. The construction will be conducted in different phases, each time increasing the annual capacity, potentially up to 100 million tonnes once the port reaches the highest capacity. The port is expected to be able to receive Panamax and post-Panamax vessels loaded with at least 6 500 containers. The expected timeline for Phase 1 is 2017-2020.</td>
<td>2 500</td>
<td>Ministry of Economy and Sustainable Development of Georgia, Anaklia Development Consortium LTD (TBC Holdings and Conti Group)</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Afghanistan-Turkmenistan-Azerbaijan-Georgia-Turkey Corridor</td>
<td>Road; Railways</td>
<td>Construction of railways and roads connecting the city of Turgundi in the Afghan province of Herat with Ashgabat and Turkmenbashi port in Turkmenistan. The project is expected to foster intra-regional trade and economic integration.</td>
<td>2000</td>
<td>Governments of Afghanistan; Turkmenistan; Azerbaijan; Georgia and Turkey</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Marabda to Akhalkalaki Railway Project</td>
<td>Railway</td>
<td>Reconstruction and rehabilitation of the Marabda-Akhalkalaki railways with an operational length of 153 km. (announced in 2007)</td>
<td>400</td>
<td>Marabda-Kartsakhi Railroads</td>
<td>Brownfield</td>
</tr>
<tr>
<td>Tbilisi Bypass</td>
<td>Roads</td>
<td>Construction of a 55 km stretch of four lane-roads. The project is part of</td>
<td>350</td>
<td>ADB</td>
<td>Brownfield</td>
</tr>
</tbody>
</table>
Energy

The overall quality of Georgia’s energy infrastructure is good, matching or surpassing the performance of wealthier neighbours such as Azerbaijan and the Russian Federation. Georgia’s transmission and distribution systems are relatively efficient, leading to losses of only 6.5% of electricity output compared to 10.1% in the Russian Federation and 11.7% in Azerbaijan (World Economic Forum, 2017[19]). Although Georgia has limited domestic oil and gas reserves, several important pipelines pass through Georgia between oil-rich Azerbaijan and Turkey, including the Baku-Tbilisi-Ceyhan (BTC), Baku-Tbilisi-Erzurum (BTE) and the Trans-Anatolian Natural Gas Pipeline (TANAP) (Emerging Markets Forum, 2019[41]).

Georgia’s electricity generation relies primarily on hydroelectric dams, which produce 81% of the country’s power, with the remainder coming from gas-fired thermal power plants (see Figure 3.9). Only 60% of Georgia’s installed hydropower capacity generates electricity due to several hydroelectric power plants needing to undergo a rehabilitation process, and the country currently only exploits one fifth of its total hydropower potential (Chechelashvili, 2007[42]). The country’s largest hydroelectric power plant, Enguri, which generates a third of all electricity in Georgia (Business Association of Georgia, 2016[43]), straddles the border of Abkhazia, one of Georgia’s breakaway regions. Although an informal agreement between Georgia and Abkhazia initially split output (40% to Abkhazia, 60% to the rest of Georgia), Abkhazian consumption has increased considerably and, in the winter months, now surpasses Enguri’s output. Abkhazia does not pay for its consumption, and the situation is a risk to Georgia’s energy security and a drain on its budget (World Experience for Georgia, 2017[44]).
Compared to hydrocarbon-rich Azerbaijan or the Russian Federation, Georgia’s energy security situation is more precarious. Its domestic energy production covers only one third of demand, and its limited oil and natural gas production covers only a small fraction of consumption (IEA, n.d.[46]). It is a net importer of coal (0.16 Mtoe in 2016), oil (1.45 Mt in 2016), natural gas (1.89 Mtoe in 2016) and, in most years, electricity (IEA, 2018[45]). Despite Georgia’s limited oil and natural gas reserves, the government has set targets to increase annual oil and natural gas production to 3 million tonnes and 2 billion m³ respectively by 2020 (UNECE, 2016[47]).

Georgia has considerable potential for non-hydroelectric renewable electricity generation, and the diversification of electricity sources is a priority of the government. In Freedom, Rapid Development and Prosperity: Government Platform 2016-2020 (see section 3.3 on Georgia’s strategic documents), the government has made improving energy security one of its main priorities, and it aims to do so by gradually weaning the country off energy imports and developing locally available energy resources (Government of Georgia, 2016[48]). Its geothermal potential, for example, is estimated at 3 terawatt hours (TWh) per year. Although Georgia has begun using geothermal water for heating and certain agricultural and industrial applications, it does not currently have any geothermal electricity generation capacity. Georgia also has 60-120 GWh of solar energy potential, but major seasonal variations make them less reliable for improving energy security (UNECE, 2016[47]).

Georgia’s current and planned energy investments are in line with the government’s plans to increase the capacity of hydropower projects for electricity generation. Although it is not yet adopted, Georgia’s Long-Term Low-Emission Development Strategy (LT-LEDS) aims to increase the share of power generation from hydro in domestic electricity consumption to at least 85% and reduce the share of non-hydro renewables in domestic electricity consumption to 2% by 2030 (United States Agency for International Development, 2017[49]). Over 92% of electricity generation projects by capacity are in hydropower, while
wind power plants only account for 4% of the total electricity generation projects (see Figure 3.10). With around 300 rivers that are economically viable for hydropower projects, which today remains largely untapped, Georgia has one of the most significant hydropower potential for investors. It has a total capacity to generate 15 000 MW, which exceeds the capacity of existing hydro plants in the country by five times. Such potential is also confirmed by a consistent growth of FDI in the energy sector, which received an average of 12% of total FDI in the country over the past five years (Georgian Co-Investment Fund, n.d.[50]). By 2020, the government aims to further attract investments in the energy sector of over USD 1.1 billion and develop at least 500 MW of installed capacity (Government of Georgia, 2016[48]).

Figure 3.10. Electricity generation projects in Georgia, by fuel

![Electricity generation projects in Georgia, by fuel](image)

Source: OECD analysis based on accessed databases as of June 2019.

Most of Georgia’s energy projects are in hydropower, in line with its goal to further develop its hydropower potential (Table 3.3). Such high-impact projects have been mainly undertaken by the private sector, but development partners such as the EBRD and the ADB have also supported such investments. Significant projects under construction include the Tskhenistskali cascade of hydropower projects, Adjaristsqali, and Shuakhevi HPPs. One of the projects, the Shuakhevi HPP plant, which is being developed by Tata Power from India with support from the International Finance Corporation, will be the first hydropower project in Georgia to be certified by the UN Framework Convention on Climate Change to reduce carbon emissions by 200 000 tonnes per year. Together, such projects have a capacity of over 859 MW and contribute significantly to the annual output of the total electricity consumption in Georgia. Other significant planned projects include the 280 MW Nenskra HPP, which is designed to meet up to 12% of the country’s total domestic demand for electricity (IBRD, IFC and MIGA, 2018[12]). Currently, more than 60 potential hydropower projects are currently at the pre-feasibility study stage (KPMG, 2016[51]).
Many of these are small hydro projects, which if properly designed and operated can contribute to the country’s renewable power capacity with a smaller environmental impact compared to large-scale hydroelectric dam projects.

### Table 3.3. Hotspot projects in the energy sector in Georgia – under construction

<table>
<thead>
<tr>
<th>Name</th>
<th>Sub-sector</th>
<th>Description</th>
<th>Project value (USD million)</th>
<th>Capacity</th>
<th>Funding source</th>
<th>Type of investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tskhenistskali cascade of hydropower plants</td>
<td>Hydropower</td>
<td>Two hydropower plants on the Tskhenistskali River. The plants have an installed capacity of 312 MW and an expected annual energy generation of 1 192 GWh. The annual output of these plants comprises 9.4% of the entire electricity consumption of Georgia.</td>
<td>534</td>
<td>312</td>
<td>Georgian Co-Investment Fund</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Shuakhevi Hydropower project</td>
<td>Hydropower</td>
<td>installed capacity of 185 MW and an annual energy generation of approximately 452 GWh on the Adjaristsqali River in south-western Georgia. The plant is expected to be able to store water for up to 12 hours and sell electricity at times of peak demand. The construction of the project started in 2014.</td>
<td>417</td>
<td>185</td>
<td>Tata Power, Clean Energy Investment, International Finance Corporation.</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Oni Cascade Hydropower Project</td>
<td>Hydropower</td>
<td>Two new hydropower plants on the Rioni River in north-western Georgia, with an installed capacity of 177.2 MW and the plants expected annual energy generation in total is 788.6 GWh. The Oni cascade of hydropower plants annual output makes up 6.2% of Georgia’s total electricity consumption.</td>
<td>330</td>
<td>177</td>
<td>Georgian Co-Investment Fund and Peri ltd.</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Adjaristsqali Hydropower Plant Project</td>
<td>Hydropower</td>
<td>greenfield run-of-the-river project with an installed capacity of 185 MW. The project is anticipated to increase Georgia’s hydropower capacity as well as increasing cross-border trading in the region. The construction started in 2015.</td>
<td>284</td>
<td>185</td>
<td>ADB; Canadian Climate Fund for the Private Sector in Asia</td>
<td>Greenfield</td>
</tr>
<tr>
<td>Black Sea Energy Transmission System</td>
<td>Electric power transmission and distribution</td>
<td>Extension of the Georgian electric system to a new 500 kV substation in proximity with the Turkish border at Akhalsikhe. The project will increase energy security and provide a balance between demand and supply from west to east Georgia. Construction of the project started in 2009 and it is co-financed by the European Investment Bank and KfW.</td>
<td>260</td>
<td>N/A</td>
<td>EBRD; EIB; KfW; Government of Georgia (unspecified)</td>
<td>Brownfield</td>
</tr>
</tbody>
</table>

<p>| (b) Planned |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Sub-sector</th>
<th>Description</th>
<th>Project value (USD million)</th>
<th>Capacity</th>
<th>Funding source</th>
<th>Type of investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Khudoni HPP</td>
<td>Hydropower</td>
<td>Power plant on the Inguri River with a capacity of over 702 MW. It is expected that the plant will</td>
<td>1 200</td>
<td>702</td>
<td>Brownfield</td>
<td></td>
</tr>
</tbody>
</table>

1 The definition of small-scale hydro varies widely from country to country, ranging from less than 50 MW (Canada, China) to less than 1.5 MW (Sweden) (IEA, 2012[133]). In Georgia, the government defines small hydro as power plants with a generation capacity between 1 MW and 13 MW; smaller plants are mini (100 kW-1 MW) and micro (up to 100 kW) (Ministry of Energy of Georgia, 2016[132]).

Unclassified
allow two other existing dams, the Enguri HPP and Vardnili HPP to generate additional energy needed during the rest of the year. The project will account for over 16% of Georgia’s hydropower generation. Its construction stopped in 1989 due to the collapse of the Soviet Union and protests over environmental concerns. The project is highly controversial as it is expected that it will displace around 2,000 people (of the 12,000 who live in Upper Svaneti), while a village with 800 inhabitants will be fully resettled.

### Nenskra Hydropower Plant

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Type</th>
<th>Capacity (MW)</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nenskra</td>
<td>Hydropower</td>
<td>280</td>
<td>AIIB; ADB; EBRD; EIB; KDB; Private sector</td>
</tr>
</tbody>
</table>

The Nenskra Hydropower plant has a planned capacity of 280 MW and is located in the mountainous Svanet Region. The project is Georgia’s most advanced hydropower installation in the Upper Svaneti region. It is expected to increase the country’s power generation capacity during the year, reduce pollution, as well as imports of electricity from neighbouring countries.

### Namakhvani Hydropower Cascade Project

Construction of two hydropower plants on the Rioni River, the Lower and Upper Namakhvani hydropower plants, each with a capacity of 333 and 100 MW respectively and a total estimated annual production of 1,514 GWh.

The project will contribute to Georgia’s objectives to achieve an hourly day-ahead balancing market for electricity by 2020. Planning started in 2016.

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Type</th>
<th>Capacity (MW)</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Namakhvani</td>
<td>Hydropower</td>
<td>730</td>
<td>Clean Energy Group (Norway) Energa Insaat ve Sanayi AS (Turkey)</td>
</tr>
</tbody>
</table>

### Tskhinvali Hydropower Project

Hydropower project in Tskhinvali city. A feasibility study of the project was carried out in 2015. Further information on the project is not yet available.

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Type</th>
<th>Capacity (MW)</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tskhinvali</td>
<td>Hydropower</td>
<td>723</td>
<td>Greenfield</td>
</tr>
</tbody>
</table>

### Atskuri Dviri Da Sakuneti Heseb Hydropower Project

Construction of three hydro stations in Niala (81.6 MW), Khertivisi (81.6 MW) and Aspindza (55.2 MW) for a total of USD 604 million. This is a priority project promoted by the Georgian Ministry of Energy.

<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Type</th>
<th>Capacity (MW)</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atskuri Dviri Da Sakuneti Heseb</td>
<td>Hydropower</td>
<td>604</td>
<td>Greenfield</td>
</tr>
</tbody>
</table>

### Note:

Refer to the Preamble for the present report’s definition of ‘hotspot’ and other information on how the projects above were selected and prioritised.

### Source:


### Water

Georgia is currently facing significant water resource challenges. In particular, there are concerns that, in the long run, Georgia’s glaciers will be affected by climate change, leading to significant reductions of water surplus. The country is already experiencing significant variability in precipitation and surface run-off of water, and these are projected to be more severe in the coming years (EBRD, 2016[11]). Droughts are also expected to put further pressure on water availability. The government has developed an urban water supply and sanitation sector development program with plans to invest USD 1.6 billion to ensure water supply and sanitation services to all of its urban residents by 2020 (ADB, n.d.[57]).

Current and planned water projects amount for around USD 1.2 billion and they are mostly focused on water supply and sanitation projects (91%), while only one project worth USD 100 million focuses on irrigation and water management to improve the delivery of irrigation and drainage services in selected areas covered by the project (World Bank,
n.d.\(^{[58]}\)). Relevant water supply and sanitation projects include an Asian Development Bank-financed program to further upgrade the water and sanitation services in a number of secondary towns, including in Zugdidi, where 84% of the people do not have access to piped water (ADB, 2014\(^{[59]}\)).

**Figure 3.11. Water projects in Georgia by sub-sector**

Planned and under construction

In USD million

![Water projects in Georgia by sub-sector](image)

*Note: Irrigation and water management includes irrigation and land market development*

*Source: ADB (2019\(^{[31]}\)), Dealogic (2019\(^{[33]}\)), World Bank (2019\(^{[56]}\)), KfW (n.d.\(^{[54]}\)), EIB (2019\(^{[38]}\)).*

### 3.3. Strengths and weaknesses of existing institutional set-up for sustainable infrastructure planning

**Strategic planning and links between long-term goals, infrastructure plans and environmental considerations**

Georgia is in need of coherent long-term development strategies, having not adopted a single strategy that lays out its vision for economic development beyond 2020. In 2014, Georgia adopted its *Socio-economic Development Strategy – “Georgia 2020”* (see Table 3.4), which aimed to more than double 2013 levels of per capita GDP and boost exports. It did not, however, articulate a clear vision of the infrastructure investments needed to support long-term sustainable growth; it only mentions the important role of transport infrastructure in trade facilitation and the country’s goal to improve energy security. In developing a strategic vision for economic development beyond 2020, Georgia should set ambitious, measurable targets with clear ministerial responsibility and define the scope and nature of infrastructure investments that will be required.

Georgia’s only other adopted strategic documents on economic development, include its *Government Platform 2016-2020* and *Freedom, Rapid Development and Welfare: Government Programme for 2018-2020*, which expand on the country’s priorities in the near term, but they do not contain quantitative, time-bound targets nor do they delegate responsibility for progress on government priorities.
Furthermore, Georgia currently has no strategic document detailing the country’s trajectory towards the Paris Agreement’s mid-century climate change goals. USAID (2017) has been helping Georgia develop a long-term low-emission development strategy since 2013 and has published a draft with measurable goals to 2030 for key sectors (energy, transport, industry, agriculture, LULUCF), but the government has not formally adopted it. Unlike all long-term low-emission development strategies that parties have communicated to the UNFCCC, Georgia’s draft strategy looks only to 2030, not to 2050. Georgia should consider following Ukraine’s example, being the first and, to date, only former Soviet Union country to submit a long-term low-emission development strategy with 2050 goals to the UNFCCC (2019).

In parallel, Georgia is developing a green economy strategy with support from GIZ, UNEP and the OECD through the “Greening Economies in the Eastern Neighbourhood” (EaP GREEN) programme. The strategy will articulate the country’s plans to transition towards a greener economy following its adoption of the 2009 OECD Declaration on Green Growth (Agenda.ge, 2017). However, the strategy is still awaiting adoption.

In order to develop the country’s energy sector, Georgia has contracted the consulting firm McKinsey & Company to aid with the production of an energy development strategy, but nothing has been formally adopted (Agenda.ge, 2018). The absence of a national energy strategy and supporting policies makes it difficult to assess energy projects’ compatibility with national supply and demand trends as well as energy security concerns and long-term environmental objectives (UNECE, 2016).

Other key sectors, like transport and industry, lack strategies to guide infrastructure development. Although Georgia has adopted transport-related strategies such as its National Road Safety Strategy (UNECE, 2016) and the Tbilisi Sustainable Urban Transport Strategy (Municipal Development Fund of Georgia, 2015), there is still no national transport development strategy with goals relating to transport infrastructure development. Georgia has adopted its SME Development Strategy 2016-2020 (Ministry of Economy and Sustainable Development of Georgia, 2015), but does not have strategies relating to industry or mining.

**Institutional set-up and decision making processes**

Georgia ranked 6th globally in 2019 on the World Bank Group’s Ease of Doing Business Index, which measures protection of property rights and investors and the quality of business regulations (IBRD, 2019). By comparison, the country ranked 100th in 2006. Georgia’s impressive pace of pro-business reforms have made the country a leader in the region in terms of market liberalisation and attracting FDI. Georgia has also made considerable progress on involving the private sector in infrastructure development by elaborating a regulatory framework for public-private partnerships (PPPs), but government bodies responsible for managing infrastructure face major capacity constraints. To analyse risks effectively and develop, screen and implement infrastructure projects, the institutional capacity of government bodies in infrastructure development need to be strengthened (World Bank, 2018).

The government needs to also better assess environmental impact assessments (EIAs), while EIAs are required for new and existing infrastructure projects, current procedures and the quality of reports do not comply with international standards (UNECE, 2016). The government recognises this shortcoming: both Georgia-2020 and Freedom, Rapid Development & Welfare: Government Programme for 2018-2020 state that Georgia aims...
to adopt transparent procedures for assessing the environmental impacts of infrastructure projects.

**List of relevant strategic documents**

<table>
<thead>
<tr>
<th>Table 3.4. Main strategic documents in force</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
</tr>
<tr>
<td>--------</td>
</tr>
</tbody>
</table>
| First Nationally Determined Contribution (NDC) | Submitted in 2017 2017-2030 Economy-wide | • Unconditional Target: to reduce greenhouse gas emissions by 15% below the business as usual scenario for 2030, this is equal to a reduction in emission intensity per unit of GDP by approximately 34% from 2013-2030.  
  • Conditional Target: to reduce greenhouse gas emissions by 25%, this is equal to a reduction in emission intensity per unit of GDP by approximately 43% from 2013-2030.  
  • Main sectors for emission reduction: Energy (transition to renewable energy), Industry (introduction of new technologies), Agriculture/Water (efficient management and policy making)  
  • Adaptation priorities: introduce innovative irrigation management and water application techniques, implement coastal zone protection technologies, implement list of strategic documents/policies |
  • Develop transport infrastructure to boost trade, specifically exports  
  • Improve irrigation and drainage infrastructure  
  • Ensure a stable and accessible energy supply in the future, reducing dependency on external energy sources  
  • Develop ecosystem services by improving management (e.g. sustainable management in the forestry sector) |
  • Improve energy security, in turn reduce energy imports  
  • Further strengthen the private sector (e.g. develop tax incentives)  
  • Develop human capital, with higher education targeted towards the needs of the economy  
  • Develop road networks and public transit, helping develop tourism |
  • Aim to maintain the ratio of public debt to GDP at a stable level |
<table>
<thead>
<tr>
<th>Document Title</th>
<th>Adoptions</th>
<th>Year Range</th>
<th>Focus Area(s)</th>
<th>Key Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>SME Development Strategy 2016-2020</td>
<td>Adopted in 2015</td>
<td>2016-2020</td>
<td>Governance, industry</td>
<td>- Enhance competitiveness of SMEs in both domestic and international markets</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Improve the skills of SMEs and develop a modern entrepreneurial culture</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Ensure the improvement of the technological ability of SMEs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Aim to increase SMEs output by 10% annually by 2020</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Increase the number of employees in SMEs by 15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Increase the productivity of SMEs by 7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Ensure that the sustainable use of ecosystem services is incorporated into national legislation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Actively introduce environmental policies in line with climatic change</td>
</tr>
<tr>
<td>National Security Concept of Georgia</td>
<td>Adopted in 2018</td>
<td>No defined timeframe</td>
<td>Governance</td>
<td>- Promote the development of a free, democratic society and strengthen the rule of law</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Increase transparency at all levels of government</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Ensure environmental security nationally and sub-nationally</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Improve relations with the Russian Federation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Develop economic cooperation and trade with the United States</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Create a database to collect data on the negative effects of climate change</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Promote climate smart agricultural practices to ensure resilience in the agricultural sector</td>
</tr>
<tr>
<td>“Produce in Georgia”</td>
<td>Adopted in 2014</td>
<td>No defined timeframe</td>
<td>Industry</td>
<td>- Aim to inject USD 27 million into production industries</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Promote the development of the industrial sector (e.g. building materials, car building, textiles, electric accessories)</td>
</tr>
<tr>
<td>National Road Safety Strategy</td>
<td>Adopted in 2015</td>
<td>2015-2020</td>
<td>Transport</td>
<td>- Ensure the construction of adequate road infrastructure in line with international standards</td>
</tr>
</tbody>
</table>
### Table 3.5. Other relevant documents

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Status</th>
<th>Time Horizon</th>
<th>Sectoral Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Environmental Action Programme of Georgia for 2012-2016</td>
<td>Adopted in 2012</td>
<td>2012-2016</td>
<td>Multi-sector</td>
</tr>
<tr>
<td>Green Economy Growth Strategy</td>
<td>Not adopted</td>
<td>No defined timeframe</td>
<td>Multi-sector</td>
</tr>
<tr>
<td>Energy Development Strategy</td>
<td>Not adopted</td>
<td>No defined timeframe</td>
<td>Energy</td>
</tr>
<tr>
<td>Government Action Plan for the Reduction of Environment Pollution from the Transport Sector in Georgia</td>
<td>Under development</td>
<td>No defined timeframe</td>
<td>Transport</td>
</tr>
<tr>
<td>National Action Plan to Combat Desertification</td>
<td>Under development</td>
<td>No defined timeframe</td>
<td>Multi-sector</td>
</tr>
<tr>
<td>Waste Management National Strategy and Waste Management National Action Plan</td>
<td>Under development</td>
<td>No defined timeframe</td>
<td>Waste</td>
</tr>
</tbody>
</table>

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*Unclassified*


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