I. Introduction and Context  

Country Context  

Ukraine is a densely populated country of 46 million people, with 68 percent of the population living in urban areas. The country has five cities with a population of over 1 million, another five with a population between 500,000 and 1 million, and some 35 cities that have populations varying between 100,000 and 500,000. The bulk of the urban population lives in towns of less than 100,000 people. Kiev is the largest city with a population of 2.8 million, followed by Kharkov with 1.5 million, and Odessa with 1 million people.

The country is emerging from the 2009 economic and financial crisis with serious structural weaknesses. Fiscal imbalances remain significant with large social transfers, inefficient public services, and significant quasi-fiscal subsidies threatening sustainability. The financial sector is
fragile and the business climate ranks persistently at the bottom of the region. Despite an export-led recovery over the past two years, output is still below pre-crisis levels and the economy remains vulnerable to volatile commodity prices and dependent on foreign financing. The public sector is large, but the quality of many public services has been deteriorating. Surveys conducted on the eve of Ukraine’s 20th anniversary since independence as well as recent social protests reveal widespread discontent with the economic situation and the state of public governance.

In the face of well-identified social and economic development challenges, successive Ukrainian governments have struggled with reform implementation. Since independence in 1991, progress in economic and social reforms has lagged behind targets and social aspirations. Behind many implementation difficulties lie fundamental challenges of economic and political governance. Corruption and state capture have been pervasive and are broadly recognized as a major development constraint.

Over the past decade, Ukraine’s authorities have shied away from confronting structural reforms, and public trust in the state has been undermined. This, in turn, has created public resistance to necessary but painful reforms of social transfers and public services. Consecutive governments have thus opted for short-term fiscal handouts, which have diminished the fiscal space needed for public investment and weakened the focus on strategic priorities.

Ukraine faces a number of complex challenges as it continues to build its agenda for socially equitable and environmentally responsible economic growth. In 2010, Ukraine adopted a National Environmental Strategy for 2020 and a National Action Plan to protect the environment from 2011 to 2015. Some of the major commitments of the Plan were to improve urban water supply and wastewater treatment, as well as decrease carbon dioxide emissions in the municipal heating sector by 10% by 2015.

In order to continue to improve implementation of both the environmental and governance reform agendas, the Government of Ukraine has requested a follow up project to build on the Urban Infrastructure Project (UIP) that was approved in 2007 and is still under implementation.

**Sectoral and Institutional Context**

**Water and Wastewater Services.** Over the past 20 years, access to water supply services in Ukraine has stagnated at 80 percent largely due to a lack of investment. The national average, however, masks wide divergences. In cities and towns, 90 percent of the population is connected to water supply and 85 percent to public sewerage networks. In semi-urban areas the levels drop to 70 percent and 50 percent respectively. In rural areas the rates are 23 percent for access to water supply services and only 3 percent for public sewerage.

While 85 percent of Ukraine's urban residents have access to sewerage, only 70 percent has access to wastewater treatment. The infrastructure for collecting and treating wastewater is either non-operational or poorly operated, and the pollution of national and international waterways continues unabated. For example, the Black Sea receives 80 percent of Ukraine's untreated water-borne waste, with severe environmental and economic consequences.

The connection rates for water supply in urban areas, although high, are deceptive because most utilities provide neither safe nor reliable service. In many areas, water supply is intermittent because service providers have inadequately maintained infrastructure due to cash flow issues. The low
quality of service is also affecting the financial performance of the sector. In the last 15 years, for instance, average non-revenue water (NRW) rose to more than 40 percent of water production which affects the cost of the utilities. The dissatisfaction with the low quality of the service is reflected in the fact that despite low tariffs, collection rates are low, at least in part because people are unwilling to pay for the services.

Most utilities are unable to generate adequate revenue to meet operations and maintenance costs due to low tariffs. As a result, the utilities are heavily dependent on government transfers to make up for the difference. However, fiscal budget constraints have resulted in inefficient service delivery, poor infrastructure maintenance, and underinvestment in the sector. The problems have been exacerbated in recent years with the sharp rise in real terms of electricity tariffs, given the energy intensive systems for water production and wastewater treatment systems.

Investment needs for upgrading the water and sewerage networks are higher than what can be mobilized by utilities, consumers and government. It is estimated that EUR 4-6 billion is needed to bring the water and sanitation systems to operational safety, and a total of EUR 22-26 billion will be required to achieve international service standards. At a minimum, 35% of water mains and 31% of the sewer network needs to be replaced.

Water supply and sewerage services in Ukraine suffer from a variety of governance issues including ownership structures and low credit-worthiness. Out of more than 6,000 water supply and sanitation utilities, 1,857 provide services to the urban population. The ownership structures of these utilities (vodokanals) ranges from communal utilities (owned by the municipalities, and accounting for 83 percent of the total number of utilities), state utilities, and private utilities. Due to the lack of cost recovery in the sector, most utilities are not creditworthy and cannot borrow from financial markets. The National Regulatory Commission for Communal Services was established in 2011 to help overcome these issues by: (i) improving cost recovery through centralized tariff setting; (ii) establishing national service standards; (iii) improved governance of the utility sector; and (iv) strengthening reporting requirements.

Solid Waste. Solid waste collection services suffer from limited operational capacity, but also from an underdeveloped landfill infrastructure. It is estimated that in 2010, 12 million metric tons of municipal solid waste was generated, significantly more than in 2000. By 2025, Ukraine will need to double its solid waste capacity. Many municipalities rank solid waste as one of their most urgent priorities. The situation in the sector is further complicated by low user fees, which makes cost recovery difficult. The current cost recovery rate is only between 5 and 7 percent (compared to 40 percent in the US). The estimated volume of investment needed in the sector is approximately EUR13 billion.

The key focus areas for the solid waste sector are the dire need of improving the quality and efficiency of services, preparing plans for expansion of the rapidly diminishing disposal space, and enhancing public awareness and participation. Preliminary findings of the Solid Waste Assessment Study indicate a rather unstable investment climate for the private sector. Low tariffs translate into a lack of capital for investment in high quality infrastructure that meets environmental standards for landfills. The lack of waste separation can significantly reduce waste volumes to landfills. Finally, the recently passed national legislation reduces the authority of municipalities and creates a confusing institutional framework with regard to responsibilities at the national level.
Relationship to CAS

The proposed operation is fully consistent with the 2012-2016 Country Partnership Strategy (CPS). The CPS recognizes water and sanitation as crucial not only to achieve higher rates of inclusive and sustainable growth, but also as a means for integrating water resource and environmental management at the national and local levels. Accordingly, the proposed Second Urban Infrastructure Project (UIP2) directly addresses Pillar 3 that aims to “improve efficiency, quality and governance of municipal infrastructure services.” Improvement in efficiency and quality of such services will also contribute to Pillar 1 by contributing to “improved governance of public finances,” and Pillar 5 by contributing to “improved infrastructure for business activities.”

The design of this operation contributes directly to Outcomes 8 and 9 of Results Area 3 of the CPS, that is:

- improved energy efficiency of targeted municipal water utilities and improved cost recovery through infrastructure investment and rehabilitation; and
- increased transparency and accountability of municipal service provision.

II. Proposed Development Objective(s)

Proposed Development Objective(s) (From PCN)

The PDO of UIP2 is to improve the quality, efficiency and sustainability of water, wastewater and solid waste services in selected cities in Ukraine.

This objective will be achieved through rehabilitation and reconstruction of WSS infrastructure in eight cities. The project will also support improvements in sustainable service delivery through the utilities performance improvement program.

Key Results (From PCN)

PDO achievements will be measured by the following indicators:

- Number of project beneficiaries; (number)
- Reduction in energy used per cubic meter (kwh/m3) of water produced and/or wastewater treated (kwh/ton) in selected utilities;
- Improvement in operating cost coverage ratio in selected utilities;
- Volume of BOD pollution load removed (tons) by treatment plants in selected cities; and
- Volume of industrial and/or municipal solid waste recycled (tons) in Kharkiv.

III. Preliminary Description

Concept Description

To build on the on-going Urban Infrastructure Project (UIP) and the World Bank’s long-term engagement in the municipal services sector, the Government of Ukraine has requested a follow up project. The proposed UIP2 project will support improvement in high-priority municipal services, on a demand-driven basis, in selected municipalities. Although municipalities are responsible for delivery of several types of infrastructure and social services, this project will focus on infrastructure services. Based on the demand expressed thus far, it is anticipated that the project will invest primarily in water and wastewater services, but will also support pilot investments in solid waste management, public lighting, and public spaces or parks.

The project will be implemented in 8 cities of different sizes. The cities under consideration are
Kiev, Kharkov, Donetsk, Zhytomyr, Kirovograd, Uzhgorod, Kolomya and Kramatorsk. Their population ranges from 60,000 to about three million with the total population of the eight cities amounting to about six million. These cities were identified based on: (i) a commitment to increase tariffs so as to ensure the sustainability of investments; (ii) their willingness to take proactive steps to improve customer service and operational efficiency; (iii) high potential for development impact; (iv) high degree of readiness for subproject investment; and (v) the economic viability of the proposed investments.

Component 1: Urban Infrastructure Improvement (estimated US$ 280 Million)
This component will finance the rehabilitation and upgrading of municipal infrastructure in water, wastewater, solid waste and other municipal services. The following investments are envisaged:

- Rehabilitation and expansion of water systems;
- Rehabilitation and upgrading of the existing wastewater and sludge treatment facilities;
- Equipment for water quality testing laboratories;
- Equipment for operations and maintenance as well as spare parts;
- Preparation of detailed designs and tender documents and construction supervision; and
- Pilot projects in areas such as solid waste management.

Component 2: Institutional Strengthening and Capacity Building (estimated US$ 10 Million)
This component aims to improve the capacity and efficiency of participating municipalities and municipal utilities to operate and manage their infrastructure systems. It would support the state’s effort in: (a) developing policies and inter-sectoral instruments for water and wastewater management and planning; (b) strengthening water and wastewater management capacity at both the local and national level; (c) strengthening local government social accountability measures based on the recommendations of the World Bank Social Accountability study; d) developing policies for solid waste management to improve municipal services delivery and strengthen governance. This component will be implemented in close coordination with the Danube Water Program. More specifically, this component will support:

- Development of key policies and instruments for water and wastewater management and planning
  - Review and update of national water, wastewater, and solid waste policies/strategies;
  - Development of service delivery Business Plans in targeted cities;
  - Assistance to target municipalities in developing medium- and long-term infrastructure investment plans (Priority Investment Planning), with realistic budgets;
  - Introduction of better information systems, performance indicators, and benchmarking; and
  - Review of the current methodology and standards for testing the quality of water and wastewater discharges.

- Strengthening water and wastewater management capacity
  - Improving transparency and customerresponsiveness through: (i) improving utilities/municipalities’ capacity to handle customer complaints; (ii) introducing systems for public participation and feedback, for example, citizen report cards, satisfaction surveys, or public hearings, as well as innovative information campaigns; and (iii) other tools to provide feedback to utilities on their performance.
  - Technical training in: administration, revenue generation, billing and collection, tariff settings, financial management, customer responsiveness, and the preparation of feasibility studies, etc.
• Developing policies for solid waste management to build municipal capacity and strengthen governance
  - Preparation of investment plans in the sector;
  - Development of environmental management plans;
  - Preparation of communication plans to enhance public awareness and participation; and
  - Ground and surface water pollution prevention plans.

Component 3: Project Management and Supervision (estimated US$ 10 Million)
This component will involve institutional support and capacity development for project management and implementation at the central and regional levels in the targeted cities. Support will include: training, staffing, and monitoring and evaluation (M&E). Feasibility studies for potential sub-projects will also be covered under this component, as will the annual project financial and technical audits of district vodokanals.

CTF funding to complement WB loan. Ukraine is eligible for the Clean Technology Fund (CTF) and has an approved Action Plan which refers to CTF co-financing of the UIP2 for $25-50 million. This financing will address energy efficiency and reduce GHG emissions in landfills, water and wastewater networks, and treatment plants. The combined funding will enable short-, medium-, and long-term investment planning by utilities and replace the current ad hoc emergency response. CTF funding will include: (a) replacement of water and wastewater pumping equipment; (b) installation of automated control systems; (c) sludge thickening equipment; and (d) landfill gas capture.

IV. Safeguard Policies that might apply

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V. Financing (in USD Million)

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VI. Contact point

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