

PUBLIC-PRIVATE PARTNERSHIP DEVELOPMENT PROGRAM (P3DP) IN UKRAINE

FINAL REPORT

USAID Cooperative Agreement # AID-121-A-00-10-00708

DECEMBER 31, 2015

This publication was prepared by FHI360 for review by the United States Agency for International Development.

PUBLIC-PRIVATE PARTNERSHIP DEVELOPMENT PROGRAM (P3DP) IN UKRAINE

FINAL REPORT

DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6
INTRODUCTION	9
THE USAID-P3DP SOLUTION	10
CHANGING CONTEXT AND NEW CHALLENGES	14
RESPONDING TO THE NEW CHALLENGES	15
KEY ACCOMPLISHMENTS	16
OBJECTIVE 1: IMPROVING THE LEGAL AND INSTITUTIONAL FRAMEWORK FOR PPPs	17
OBJECTIVE 2: IMPROVING INSTITUTIONAL PPP SUPPORT SERVICES	20
OBJECTIVE 3: DEVELOPING PUBLIC AWARENESS AND STAKEHOLDER CAPACITY TO IMPLEMENT PPPs	23
OBJECTIVE 4: ASSISTING MUNICIPAL EFFORTS TO CREATE REPLICABLE PPP PILOTS	28
LESSONS LEARNED	36
NEXT STEPS FOR PPPS IN UKRAINE	40
ANNEXES	44

ACRONYMS AND ABBREVIATIONS

AMDI Agriculture Marketing and Development Institute

AmCham American Chamber of Commerce

CCDS Climate Change and Development Strategy

CDCS USAID's Country Development Cooperation Strategy 2012 –2016

CLC Commercial Law Centre
CMU Cabinet of Ministers of Ukraine

DBFO Design-Build-Finance-Operate

DESPRO Swiss-Ukrainian Decentralization Support Project

DFAIT Canadian Department of Foreign Affairs and International Trade

EBRD European Bank of Reconstruction and Development

EC-LEDS Enhancing Capacity for Low Emission Development Strategies

EEF Eastern European Foundation
ENVSEC Environment and Security Initiative

ESCO Energy Service Company

EU European Union
FHI 360 FHI Development 360
GCC Global Climate Change

GCCI Global Climate Change Initiative

GDP Gross Domestic Product

GHG Greenhouse Gas
GHI Global Health Initiative

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

GOU Government of Ukraine

IBRD International Bank for Reconstruction and Development IBSER Institute for Budgetary and Socio-Economic Research

IDPs Internally Displaced Persons
IFC International Finance Corporation
IMF International Monetary Fund
KEI Kyiv Economic Institute
KCSA Kyiv City State Administration

LAESM Local Alternative Energy Solutions in Myrhorod Project

LEDS Low Emissions Development Strategy LROT Lease-Renovate-Operate-Transfer

M&E Monitoring and Evaluation MARPs Most-At-Risk-Populations

MEP Ministry of Environmental Protection of Ukraine

MHR Municipal Heating Reform

MOEDT Ministry of Economic Development and Trade

MOF Ministry of Finance

MRDCH Ministry of Regional Development, Construction and Housing and Communal Services

MLC Municipal Law Center

MSFI Municipal Finance Strengthening Initiative

NAESCO National Association of Energy Service Companies

NAPA National Academy of Public Administration

NATO North Atlantic Treaty Organization

NCCSR National Commission of Communal Services Regulation NCMSR National Commission on Municipal Services Regulation

NGO Non-Governmental Organization

NPA National Project Agency

OECD Organization for Economic Co-operation and Development
OSCE Organization for Security and Cooperation in Europe

PIEC PPP & Infrastructure Expert Center

PPP Public-Private Partnership

P3DP Public-Private Partnership Development Program

Rada Verkhovna Rada of Ukraine (Parliament)

REC Regional Environmental Centre for Central and Eastern Europe

REDS Resource Efficient Development Strategy

ROT Rehabilitate-Operate-Transfer

RT Round Table

SIP [PPP development] Strategy Implementation Plan

SMEs Small and Medium-sized Enterprises

SOE State Owned Enterprise SPA State Property Agency

SPFU State Property Fund of Ukraine SWM Solid Waste Management TA Technical Assistance

U-Media USAID's Strengthening Independent Media in Ukraine

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Program

UNITER Ukraine National Initiatives to Enhance Reforms
USAID United States Agency for International Development

EXECUTIVE SUMMARY

When the Public-Private Partnership Development Program (P3DP) launched in October 2010, Ukraine was already suffering from serious economic challenges. During the five-year life of the Program, these challenges only increased: a nationwide social revolution brought the nation to a standstill. Political upheaval led to the ouster of then-President Yanukovich and key government officials, ushering in a new era of reform and a decisive shift towards Europe. Russia's response – a combination of military and economic measures – deepened the economic crisis. At the end of the Program in December 2015, Ukraine's economic position remains perilous and its political stability is by no means assured. The new, reformist government faces its greatest challenges since Ukraine achieved independence in 2001.

The turbulence in Ukraine interfered with the implementation of P3DP at every level. Presidential and parliamentary elections as well as the appointment of a new government, disrupted political continuity and pushed PPP-related issues to the back burner. The restructuring of the Ministry of Economic Development and Trade (MOEDT) led to uncertainty about the newly established PPP Unit's ongoing role as well as frequent staff turnover. At the local level, municipal and regional officials had less capacity to focus on PPPs. One pilot PPP, in Simferopol, was shut down as a result of Russian occupation of the Crimean peninsula.

However, these changes also created new opportunities for PPPs, which the Program was able to tap to successfully accelerate PPP development in Ukraine. Ukraine's budgetary crisis, coupled with a 1.5 million population of internally-displaced persons (IDPs) forced policymakers to consider new models for financing infrastructure and social services. A strong push for reform, a requirement for Ukraine to access IMF funding, created greater interest in transparent procurement mechanisms such as those used in PPP transactions. The risk of a gas shutoff increased interest in renewable fuel and alternative energy sources, both of which were important components of P3DP's pilot PPP initiatives. This led to much greater interest in PPPs by officials at the national, regional, and municipal levels. P3DP was therefore able to score numerous successes and leave behind a solid foundation for further PPP development.

The activities and accomplishments of P3DP from inception in October 2010 to closure in December 2015 are summarized in this report. P3DP's activities were implemented under four objectives, each of which realized accomplishments that contributed to the overall success of the Program. Key accomplishments are summarized below:

(i) Improving the legal and institutional framework for PPPs

- Creation of a national PPP policy. Approved in August 2013 under CMU Decree #739, the PPP concept sent a clear signal to government and the private sector that PPPs would be a valid mechanism for procuring infrastructure and public services in Ukraine.
- Adoption of a new PPP framework law. Working closely with the MOEDT and other stakeholders, P3DP made significant contributions to the development of amendments

- to the PPP law. On November 24, 2015, the Verkhovna Rada approved many of the proposed amendments, which enhance the attractiveness of PPPs by simplifying transaction procedures and providing greater protections and investment incentives to private partners.
- Improvement of secondary laws and governing regulations. Many proposed improvements to legislation affecting PPPs were passed. Key among these were amendments to the budget code, which enables government to make long-term budget commitments necessary for PPPs (April 2015); simplifications to licensing procedures for the heating and water sectors (March 2015); and improvements to leasing and concession legislation (October 2013).
- Simplification of PPP tendering and appraisal procedures. P3DP contributed significantly
 to the development of CMU Decree #384, On Efficiency Analysis and Tender
 Procedures of Public-Private Partnerships, which passed in July 2014. The amendment
 simplifies tendering and project appraisal procedures and resolves numerous legislative
 contradictions that interfere with PPPs.
- Methodology for PPP Feasibility Studies and Appraisals. P3DP developed the Methodology for Development of Feasibility Study for PPP Projects, which was approved by the MOEDT, as well as a practical guide to preparing PPP feasibility studies and appraisals.

(ii) Improving institutional PPP support services

- Establishment of PPP Unit within the MOEDT. P3DP played a significant role in the
 establishment of MOEDT's PPP Unit, which provides guidance and support for PPP
 implementation in Ukraine. P3DP provided advice on the PPP implementation process
 and helped define the PPP Unit's role and responsibilities within the limits of existing
 legislation.
- Establishment of the PPP & Infrastructure Expert Center (PIEC). P3DP established the
 PIEC in collaboration with the American Chamber of Commerce in Ukraine (AmCham)
 with support from the MOEDT and the Ministry of Regional Development, Construction,
 Housing and Communal Services (MRDCH). It serves as serves as a platform for private
 sector and other stakeholders to advocate for legislative and policy reforms needed for
 PPP development.

(iii) Developing public awareness and stakeholder capacity to implement PPPs

- Significant growth in PPP awareness in Ukraine. A baseline survey in 2011 and followup surveys in 2014 and 2015 showed that knowledge of PPPs in PPP pilot cities increased significantly over the life of the Program.
- Ukrainian language PPP materials. P3DP leaves behind a significant body of knowledge
 in Ukrainian that provides tools to learn about PPPs and PPP development in Ukraine.
 These include an online PPP course, case studies, guidance notes, sector studies,
 reports, and a PPP textbook. All materials are available online at ppp-ukraine.org, where
 they will be hosted for at least five years.
- (iv) Assisting municipal efforts to create replicable PPP projects

- Two successful pilot PPPs. P3DP served as transaction advisor for two successful PPPs in sports & recreation (2013) and alternative heating with biofuel (2014). These demonstrated that PPPs can successfully be implemented in Ukraine and pave the way for further PPPs in the future.
- Development of replicable models. In cases of pilot PPPs that were not completed (landfill gas/solid waste management, parking, education, healthcare, parks & recreation), the feasibility studies, financial models and stakeholder outreach methods employed by P3DP have been used by local government and in some cases are being replicated by other municipalities.

(v) Other initiatives

- Mitigating climate change and promoting renewable energy. P3DP played an important part in implementing USAID's Global Climate Change and Development Strategy in Ukraine. P3DP's multi-faceted approach helped create the conditions necessary for private investment, enhancing the capacity of individuals and institutions to create economically viable projects, and implementing PPP pilots that will serve as models for replication. The resulting framework supports Ukraine's transition to climate resilient low emission economic development. P3DP assistance in this area included inclusion of climate provision in the PPP Concept; amendments to laws facilitating alternate energy use; amendments to energy efficiency legislation that make energy service company (ESCO) contracts efficient for the public sector; and solid waste management tariff reform.
- Privatization support. In addition, P3DP supported pre-privatization work in anticipation
 of a major government privatization effort. Many elements of PPPs, such as feasibility
 studies, legislative reviews, market sounding, stakeholder communications, and
 transparent bidding processes are also important in the privatization process.

INTRODUCTION

The public sector in Ukraine lags significantly behind European and Eurasian countries in providing reliable infrastructure and public services. Due to decades of economic inefficiencies and lack of maintenance, investment in excess of \$30 billion and growing is needed in public infrastructure. With an ongoing financial crisis, the government simply does not have the public funds to finance needed projects. One solution adopted in many parts of the world is the use of public-private partnerships – or PPPs – to attract private investment, management and technology. The Public-Private Partnership Development Program (P3DP) was launched in September 2010 by the United States Agency for International Development (USAID) to promote the use of PPPs in Ukraine.

In 2010, the environment for PPPs was extremely poor. Ukraine's investment climate was one of the worst in the world. Awareness of PPP benefits and how to implement them was extremely low. The government was corrupt and unstable. Within this context, the P3DP team pursued four interrelated objectives:

- 1. Creating a legal and regulatory environment conducive to PPPs;
- 2. Establishing a national PPP unit and working with other institutions to bridge related public and private interests;
- 3. Developing public awareness and stakeholder capacity to implement PPPs; and
- 4. Supporting municipal efforts to create pilot PPP projects in key public service sectors.

Despite this challenging environment, P3DP made progress in laying the foundation for PPPs. Legislation was improved, a PPP Unit was established within the Ministry of Economic Development and Trade (MOEDT), trainings and awareness raising activities were conducted, and work began on ten pilot PPP projects. Then in 2013, during the third year of the program, Ukraine experienced significant political, economic and social changes. A popular protest triggered by then President Yanukovich's rejection of the EU Association Agreement led to his abandoning the presidency and fleeing to Russia, which soon after occupied Crimea and initiated a conflict in the Donbas region in the East. Ukraine quickly formed a new government that initiated a reform program that significantly altered Ukraine's development objectives.

P3DP responded to the changing needs and new requests of the national and local governments. This included showing how PPPs can be used to introduce e-Government services, help solve the long-term housing/health needs of internally displaced people (IDPs), and stimulate the economy by improving seaports or establishing industrial and technical parks. P3DP also supported Ukraine's efforts to improve State Owned Enterprises (SOEs) by improving management and governance, attracting private sector investment through privatization and PPPs.

This report describes how P3DP activities overcame many challenges, adjusted to a changing environment, and laid a foundation for private sector participation in Ukraine's economy through the creation of PPPs.

THE USAID-P3DP SOLUTION

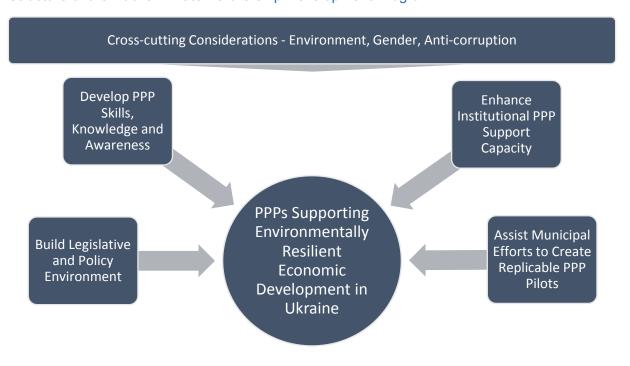
Overview

Ukraine's Parliament passed an initial PPP "framework" law on July 1, 2010. Unfortunately, this legislation was not based on international best practices; nor did it resolve the problems and conflicting issues with many secondary laws and regulations governing PPP agreements. This failure was a reflection of the government's lack of understanding of PPPs and highlighted the need to improve legislation and educate the government, general public, and other stakeholders, on the benefits of PPPs and how to design and implement effective partnerships.

To address these needs and support Ukraine's efforts to implement PPPs, the five-year \$12.5 million USAID-funded P3DP was launched on September 30, 2010.

P3DP's goal was to create an environment conducive to PPPs and to promote their use in improving infrastructure and public services.

Structure of the Public-Private Partnership Development Program



P3DP Approach

To achieve its goal, P3DP pursued the achievement of four interrelated, mutually-reinforcing objectives:

Objective 1: Improve the legal and regulatory framework for PPPs. A solid legislative and regulatory base and clear government policies are needed to foster the development of PPPs. Early in the program, P3DP conducted an extensive review of existing PPP legislation, policies, and regulations in order to establish a baseline and guide technical assistance.

Closely working with the MOEDT PPP Unit and business associations, P3DP drafted laws, led and participated in working groups, produced research papers, reviewed and recommended draft amendments, and advocated the adoption of the proposed reforms. As a result, a National PPP policy was created and adopted, a new PPP framework law was passed, and numerous important secondary laws and resolutions were issued covering PPP appraisals and project preparation, risks assessment, provision of state support for PPPs, information exchange between public and private partners in PPP transactions, land allocation in PPP projects, budget regulations, investor rights, ESCO contracts, and other issues impacting PPPs.

Objective 2: Establish Institutional PPP Support Services. P3DP worked closely with

Ukraine's MOEDT to establish a PPP Development Unit which was formally authorized on June 30, 2011. Through onsite workshops, study tours to neighboring countries, and regular consultations, the PPP Unit acquired the capacity to fulfill its responsibilities related to improving the PPP environment and serving as a resource for municipalities and government agencies seeking to introduce PPPs to improve the efficiency and quality of public services and infrastructure. Within the American Chamber of Commerce in Ukraine (AmCham) P3DP



P3DP's Legal Advisor Ruslan Kundryk presents detailed concepts on PPPs to MOEDT officials.

created the PPP & Infrastructure Expert Center (PIEC). The Center serves as a platform for uniting business and government interests to advocate reforms and promote PPP opportunities.

Objective 3: Develop public awareness and stakeholder capacity to implement PPPs. An initial survey of key stakeholders throughout Ukraine identified the lack of awareness of PPP benefits and inability of government to create and implement effective PPP projects as major constraints. To overcome these, P3DP conducted over 60 events reaching nearly 3,000 people, including practical workshops, knowledge seminars, and conferences, to increase understanding of PPP benefits, and instill the knowledge and practical skills needed by

government partners to identify, develop and manage successful PPP projects. P3DP also guided over 10 municipalities in using stakeholder communications strategies that enable them to engage key stakeholders throughout the PPP preparation process.

Objective 4: Assist municipal governments to develop pilot PPP projects. USAID

recognized that the creating, tendering and implementing of actual PPP projects can serve as a "catalyst" necessary to accelerate and expand the use of PPPs throughout the country. P3DP worked with over 10 municipalities in their efforts to implement pilot PPPs in key sectors such as health, education, alternative energy, municipal waste management, parks and recreation, and transport. Knowledge gained through the practical experience of pursuing these pilots resulted in essential information that guided legal, policy and other P3DP technical



Mayor Shostak of Malyn speaks about the impact of P3DP's biofuel PPP on the city budget [screen shot].

assistance, as well as research and tools that assisted other municipalities and agencies in their efforts to create PPPs. Pilot projects in alternative energy and parks and recreation were fully implemented and later replicated by other municipalities.

Cross-Cutting Considerations

P3DP incorporated important cross-cutting issues in the design of all of its work, including:

- Consideration of Gender Issues. P3DP integrated gender considerations into all
 training and awareness activities so that stakeholders included gender sensitive issues
 in making decisions related to PPP development; from creation of general policy to
 specific design of PPPs. For example, ensuring proposed PPP projects provide for
 equal access by those with disabilities and take into account concerns of women and
 children.
- Addressing Environmental Impact. P3DP ensured that all technical assistance focused on improving PPP-related policies, regulations, laws, and developing pilot PPP projects that highlighted environmental issues. The Ivano-Frankivsk and Vinnytsia Solid Waste Landfill Management and Gas Treatment PPP projects aimed to harness harmful gas emissions for energy use, while the successful Malyn Municipal Heating with Alternative Fuel PPP project is being replicated by other cities.
- Addressing Anti-Corruption. Good practices require that PPPs conduct open and transparent tender processes. P3DP's specific contributions towards addressing Anticorruption in the PPP context, include:

- 1. Educating officials, the private sector, NGOs and the media about the role PPPs can play in combating corruption in public procurement. This included conducting a series of seminars for media members to help them understand the media's role in ensuring that proposed PPPs are in the best interest of the public and the process used to develop and implement them is not corrupt.
- 2. Employing a stakeholder communication process that engages community groups and other stakeholders from initial concept through PPP tendering and implementation to ensure that their concerns and issues are addressed and the private partner is selected in an open, transparent and fair environment.
- 3. Strengthening legislation that increases transparency and overall attractiveness of PPPs. For example, the new PPP framework law will increase private sector interest and result in competitive bidding through a transparent process.

Cooperation and Coordination with other Organizations and USAID Activities

P3DP cooperated with multiple government agencies tasked with improving the PPP environment and providing support to these municipalities, primarily the MOEDT and the State Agency for Investments and National Projects Management, which was later eliminated during government restructuring. P3DP also assisted the Ministry of Infrastructure, the Ministry of Regional Development Construction, Housing and Communal Services (MRDCH) and was an active contributor to the Verkhovna Rada's PPP Working Group, formed under the Committee for Industrial and Regulatory Policy and Entrepreneurship. Both the National Commission for Communal Services Regulation and the Autonomous Republic of Crimea's MOEDT received P3DP assistance.

P3DP also closely cooperated with the Commercial Law Center in evaluating PPP-related legislative and policy changes and in partnership with AmCham created the PIEC; a platform for businesses and other stakeholders to create and advocate for reforms. The East European Foundation (EEF), the Kyiv Economic Institute (KEI), the Institute for Budgetary and Socio-Economic Research (IBSER) and the Agrarian Markets Development Institute (AMDI) were also important P3DP partners.

P3DP cooperated with other USAID programs, including AgroInvest (led by Chemonics), the Partnership for Sustainable Water Supply for Agriculture Development in Crimea (implemented by AMDI), the Ukraine National Initiatives to Enhance Reforms (UNITER) and the Myrhorod Biofuel Municipal Heating project. It also collaborated on PPP-related issues with the World Bank and its private sector development arm, the International Finance Corporation (IFC).

CHANGING CONTEXT AND NEW CHALLENGES

At P3DP's inception, the main challenges to PPP development in Ukraine were well known: a poor business and investment climate; a regulatory environment that restricted flexibility regarding tariff setting; state and municipal budgeting procedures that discouraged if not prevented long-term agreements; unclear decision making authority and processes; corruption; and numerous other obstacles. Acknowledging the urgent and growing need of PPPs, the Government of Ukraine (GOU) and USAID determined that it was critical that the Program be implemented to address these issues and improve the PPP enabling environment.

The last two years of the P3DP Program were implemented in an even more challenging environment. In November 2013, Ukraine underwent significant economic, legislative and political changes and a conflict with Russia that resulted in occupation of seven percent of the country's territory. The significance of these events cannot be overstated.

Key events include:

- Popular uprising. The Maidan Revolution, or the "Revolution of Dignity," began in November 2013 as a popular protest against former President Yanukovich. Sparked by his decision to reject association with the EU in favor of Russia's Customs Union, the government's history of corruption and violent response fueled a protest movement, which spread throughout the country. In February 2014, following the deaths of approximately 100 protesters, Yanukovich and many of his entourage fled the country.
- War with Russia. Days after President Yanukovich fled Ukraine, Russia occupied the
 Crimean peninsula and soon annexed the territory. In April, Russia triggered separatist
 uprisings across southern and eastern Ukraine by providing military leadership,
 weapons, mercenaries and financial support. In the eastern part of the country, sufficient
 local support enabled the separatists to seize territory they still control today. Although
 military operations have decreased, military maneuvers and conflicts occur daily.
- Government restructuring. Petro Poroshenko was elected president on May 25, 2014.
 In June, he signed the EU Association Agreement and committed Ukraine to a reformoriented path. Reorganization of government ministries, including the MOEDT, led to significant reductions in staff and high turnover. This impacted the MOEDT's PPP Unit, creating the need for P3DP to repeat capacity building efforts. Additionally, turnover at the regional and municipal levels resulted in losing "champions" of PPP initiatives, slowing if not halting some projects.
- Internally Displaced Persons (IDPs). The war and occupation of Crimea displaced over 1.3 million Ukrainian citizens, adding a significant burden to already strained State-

funded infrastructure, housing, healthcare and education services. Addressing their short and long-term needs is one of the biggest social challenges facing the government today.

Economic disruption. Ukraine's economy, already weak, suffered significantly from
these developments. The war destabilized an important economic region of the country
and added significant costs to the government, which is already struggling with limited
resources and a sharply depreciating currency. Russia banned the import of many
Ukrainian products, bringing Ukraine closer to an economic collapse.

RESPONDING TO THE NEW CHALLENGES

The new GOU priorities include implementing reforms, battling corruption, decentralizing government powers, stabilizing and rebuilding the economy, and addressing the needs of IDPs. Because they were poorly positioned to manage conflict-related reconstruction and development without assistance from the international community and the private sector, the

GOU, regional and municipal governments requested P3DP to tailor assistance to support their efforts to address these needs. In response, P3DP intensified technical assistance in five important areas not initially envisaged:

 Facilitating Private Sector Participation in Addressing Long-Term IDP Needs.

The ongoing conflict between Russiansponsored armed groups and Ukrainian forces has resulted in over a million IDPs in need of safety and shelter. The numbers continue to grow. Multiple agencies have been working to address their immediate and short-term needs. None, however, are addressing the longer-term issues related to housing and health services. To address this gap, The PPP Practical Guide provides clear and comprehensive implementing information in Ukrainian for the identification, preparation and analysis of the effectiveness of public-private partnerships. The manual provided the basis for development of PPP projects. The Guide can be used by:

- The managing partner or after receipt of proposals for a PPP private partner;
- MOEDT of Ukraine, to analyze the efficiency of the implementation of PPP in the decision-making process;
- The private partner in the preparation of proposals for the implementation of PPPs
- Other stakeholders to improve skills relevant to the preparation of PPPs; and
- A wider audience of those interested in the practical PPP implementation issues

P3DP conducted studies and workshops highlighting specific opportunities and alternative ways to mobilize the private sector in addressing these needs.

Introducing E-Governance PPPs to Improve Public Services and Reduce Corruption.
 As part of its efforts to reduce corruption and increase efficiency, the GOU has made a strong push to increase the use of e-Governance at the national, regional, and local levels.

This involves the use of information and communication technologies in public administration combined with organizational change and new skills to improve public services and democratic processes. The e-Governance model requires significant financing, new technology, and technical and management skills not currently available. One solution is for the private sector to develop and provide these services in partnership with government. P3DP conducted seminars and trainings to introduce approaches show how PPPs can support the introduction of e-Governance in Ukraine.

- Supporting Innovation and Economic Growth by Establishing Industrial /Technoparks. The 2012 Law on Industrial Parks governs the establishment and operation of industrial parks in Ukraine, including the rights and responsibilities of all involved parties. The stated purpose of the law is to attract investment, create jobs, and stimulate economic development. The law has proven ineffective in attracting investment and almost no Industrial Parks have been established. Private sector participation in industrial and technical park development through PPPs has the potential to change this. At the request of national and local governments, P3DP experts prepared a study with specific recommendations on policy and regulatory reforms that provide greater incentives for industrial park development.
- Developing PPP Strategies to Rehabilitate Strategic Infrastructure. The GOU plans
 mass privatization of state enterprises over the next couple of years. Priorities include ports,
 railways, airports and the energy sector. To support these efforts, P3DP experts conducted
 an analysis of the port sector and made specific recommendations on how to facilitate
 private sector participation through PPPs in developing, operating or maintaining port
 assets.
- Improving State Owned Enterprises (SOEs). In response to a GOU request for assistance
 to help prepare a large state owned enterprise for investment, P3DP received a three-month
 no-cost extension to develop the primary components of a "vendor's due diligence" and
 create a Virtual Data Room where SOE management, government officials, interested
 investors, and other stakeholders can readily access the SOE's due diligence materials.

KEY ACCOMPLISHMENTS

In spite of the many challenges encountered during a period of extreme political and economic instability, as well as an ongoing war, P3DP succeeded in establishing a firm foundation that Ukraine can use to introduce PPPs as a means of developing infrastructure and improving public services. P3DP contributed significantly to the improvement of the PPP enabling environment in Ukraine, demonstrated that PPPs can be implemented in the country's challenging environment, and showed how PPPs can play an important role in addressing emerging social needs and new government priorities. In the final months of the program, P3DP

saw a surge in demand for PPP-related services; coinciding with a substantial increase in public awareness about the important role that PPPs can play in improving services and the economy.

OBJECTIVE 1: IMPROVING THE LEGAL AND INSTITUTIONAL FRAMEWORK FOR PPPS

Although the reform process has been difficult, due to high turnover among officials and political

A sound legal and regulatory framework is necessary to make PPPs a viable tool in Ukraine for improving infrastructure and key public services such as health, education, energy, waste management, parks and recreation, and transport. As a result of P3DP's policy advice, legal analyses and recommendations, drafting of legislation, and advocacy for needed reforms, Ukraine's PPP enabling environment was significantly improved. A National PPP Policy was established to guide government and send a strong signal to the private sector that Ukraine wants to partner with the private sector to improve services. A new PPP Framework law created and advocated by P3DP was adopted. Additionally, multiple secondary laws and regulations were improved and governing resolutions created with P3DP support were issued.

instability, notable progress in improving the PPP legislative and regulatory framework and building essential institutional support has been made. P3DP used the extensive study conducted early in the Program on the PPP laws and regulations to guide its technical

assistance efforts. As a result of this work, PPP policies were introduced, governing legislation and regulations were improved, and resolutions and mandatory tools guiding the creation and evaluation of PPPs were issued.

Creation of a National PPP Policy

P3DP worked with the MOEDT to develop the country's first National PPP policy. Approved in August 2013 under CMU Decree #739, the PPP concept identified priority sectors in need of private sector investment and partnership; sending a clear signal that PPPs in infrastructure and public services were being encouraged. With public finances and infrastructure



MOEDT presents key issues at a roundtable discussion on the PPP Development Concept, which was approved by the Cabinet of Ministers in August 2013.

devastated by corruption in the previous government, poor management of the economy, and armed conflict with Russia, the private sector's financial, technical and managerial resources will be critical to Ukraine's long-term development and growth.

Adoption of New PPP Framework Law

On November 24, 2015, the Verhovna Rada of Ukraine approved Draft Law #1058, which significantly improved the existing PPP Framework Law. P3DP led the drafting of the legislature and worked closely with the MOEDT's PPP Unit, the Committee on Industrial Policy and Entrepreneurship, and PIEC within AmCham, in advocating for its adoption. The new law improves the PPP enabling environment and makes Ukraine more attractive to private partners by:



Verkhovna Rada of Ukraine

- Allowing creation of "Special Project Vehicle" (SPV) as a legal entity to implement the PPP project;
- Simplifying the procedure for allocating land to the PPP;
- Allowing public and private partners to conclude agreements that provide joint ownership rights for the constructed and/or acquired PPP objects;
- Providing protections of the investor's right for compensation of the value of its investments if the PPP is cancelled;
- Authorizing alternative types of payments for inclusion in PPP agreements, including tariffs and availability fees; and
- Providing a private partner the right to terminate PPP agreements if the project becomes financially infeasible due to state regulator's changes in tariff policy or other government actions.

Improved Secondary Laws and Governing Regulations

In addition to the PPP Framework Law, multiple underlying secondary laws and regulations govern the creation and implementation of PPP projects in Ukraine. In cooperation with the MOEDT's PPP Unit and other stakeholders, P3DP improved a number of these, including:

- Budget Code: The Commission for Regulation of Communal Services requested P3DP support in amending budget laws that will provide incentives to implement energy efficiency projects in public buildings by allowing long-term budget commitments. The Commission also requested support in revising laws to facilitate use of energy performance contracts. P3DP developed the proposed amendments through collaboration with the Institute for Budgetary and Socio-Economic Research (IBSER). The amendments were adopted in April 2015, thereby enhancing the attractiveness of PPPs with ESCOs.
- Leasing and Concessions: P3DP analyzed existing legislation and provided input to legislative reforms to require fair payments to the private partner upon early termination

- of concession agreements. The law governing leasing and concession agreements related to provision of district water, heating and sanitation communal facilities (#0857), was successfully amended in October 2013, thereby reducing the risks of entering into PPPs in these sectors.
- Licensing Procedures: On March 26, 2015, President Poroshenko signed draft law #0934, On Licensing of Certain Types of Economic Activity. The law simplified licensing procedures by eliminating multiple documents, approvals, and regulations in the heating and water sectors. P3DP provided many recommendations to the legislative reform, which were identified in the P3DP's PPP legal and regulatory diagnostic report.

More Effective and Efficient PPP Project Preparation Process

PPPs are complex in nature, but in Ukraine the magnitude of the mandated processes to create, implement and monitor the projects discourage their use. P3DP worked closely with the MOEDT's PPP Unit and other government and private sector stakeholders to create guidance tools and processes. (For example, the Cabinet of Ministers of Ukraine (CMU), Ministry of Finance (MOF), and leading business associations, such as AmCham, the European Business Association, and the US-Ukraine Business Council). Examples include:

- PPP Tendering and Appraisal Procedures. P3DP achieved a significant policy success with the approval of amendments developed, recommended and advocated by P3DP to CMU Decree #384, On Efficiency Analysis and Tender Procedures of Public-Private Partnerships in July 2014. As a consequence the amendments to the MOEDT Order #255 "On PPP Appraisal Methodology" were developed, discussed with MOEDT and submitted to the Ministry for formal approval. The amendment simplifies tendering and project appraisal procedures and resolves numerous legislative contradictions. These measures mitigate corruption and remove major hindrances to private sector participation in PPPs. Together with CMU Resolution #81 On Exchange of Information between Public and Private Partners during PPP Project Implementation, CMU Resolution #40 On Provision of State Financial Support of PPP Projects, CMU Decree #384 and MOEDT Order #255 suggest the full scope of PPP projects development and implementation in Ukraine.
- PPP Risk Assessment Methodology. The PPP Risk Assessment Resolution, authored by P3DP, amends CMU decree #232, which regulates the activities of municipalities or other public partners regarding PPP risk assessment and management. The draft decree was finalized and approved by the MOF. As of November 2015, it is under review by the Ministry of Justice and then will go to the CMU for approval and adoption.
 - PPP Guide for Municipal and Regional Authorities on Preparation of Feasibility
 Studies for Public Private Partnerships

P3DP developed the *PPP Guide* to orient better municipalities and regional authorities on PPP policy legislation and regulatory acts. The Guide describes the structure of the Feasibility Study Report and provides the key elements of the appraisal procedure of that study, which has to be conducted by municipal councils and/or regional authorities before approving implementation of the project under a PPP mechanism. The PPP Guide served as the basis for a series for trainings for pilot P3DP regions, which were conducted in the December 2012 – February 2013 period. The results of these trainings can be seen from the PPP developed in the town of Oster (Chernigiv region) in 2014 and whose final PPP agreement was signed on June 23, 2015. This PPP in Oster replicated the Malyn Pilot PPP, which was set up to deal with the provision of central heating.

OBJECTIVE 2: IMPROVING INSTITUTIONAL PPP SUPPORT SERVICES

The GOU recognized that many municipalities and agencies lack the technical capacity and expertise to create viable PPP projects. This shortcoming prevents the government from effectively addressing urgent infrastructure and public service needs or advancing longer-term economic development goals. P3DP helped to create the PPP Unit, based within the MOEDT, to address these and other issues hindering PPP development. P3DP trained and assisted the PPP Unit to gain the capacity to formulate and coordinate PPP-related policy issues, ensure quality of proposed PPP projects, protect public interests, promote PPPs, and support municipalities in their efforts to create PPPs. P3DP worked with leading business associations to establish the critical cooperation and communication between business and government needed to improve the PPP environment and create viable and bankable PPP opportunities.

P3DP worked toward institutionalizing the PPP knowledge and skills needed to create policy, improve regulations, and guide the creation and monitoring of PPP projects that bring value to Ukrainian citizens. P3DP led the establishment of the PPP Unit within the MOEDT and helped clarify and its legal authority and responsibilities. Practical workshops and on-site consulting enhanced the PPP Unit's capacity to fulfill these duties. In response to specific requests, P3DP also assisted the Ministry of Infrastructure, the Ministry of Health, regulators of the municipal waste sector, and other agencies and private sector stakeholders.

Enhanced PPP Institutional Support and Capacity

New MOEDT leadership recognized the importance of both PPPs and the role of its PPP Unit for improving the legal and regulatory environment, establishing guiding policies, and providing guidance to agencies and municipalities working to introduce PPPs. P3DP supported the continued development of the PPP Unit by conducting over 10 tailored trainings and creating guidance tools, policies, and procedures that will help the PPP Unit fulfill its role as a resource to ministries and municipalities working to develop PPPs.



Opening of training workshop on preparation of the PPP feasibility studies and project appraisals. P3DP's training transferred PPP knowledge and skills to government officials.

The PIEC, formed in collaboration with AmCham, complements this institutionalized

support by serving as an effective platform for promoting PPPs, connecting municipalities with interested investors, and advocating for needed reforms. The work of the PPP Unit and the PIEC will be further enhanced by the efforts of educational institutions and consulting organizations to provide needed PPP training and project consultations. P3DP tools they will use include a PPP e-learning course, a Ukrainian-specific PPP textbook, local case studies, Sector Briefs, Guidance Notes and other materials.

Establishment of the PPP Unit and PPP Implementation Processes

P3DP played a significant role in the establishment of the MOEDT's PPP Unit, which provides guidance and support to the MOEDT for PPP implementation in Ukraine. P3DP provided advice on the PPP implementation process and helped define the PPP Unit's role and responsibilities within the limits of existing legislation. The process has been tested through the successful implementation of three PPP pilots (two were implemented with the support of P3DP, while the third PPP was a replication of Malyn PPP project and was developed by the Oster city council independently). Because of uncertainties during the restructuring of the MOEDT, the Ministry



Participants of the PPP Study tour to St. Petersburg in 2011 at a presentation by the Government of St. Petersburg's PPP Unit managers.

did not concentrate enough efforts on the PPP Unit until 2015. The PPP Unit, however, remains in place after the restructuring, has been staffed, and received training and support from P3DP through the end of the Program.

Establishment of the PPP & Infrastructure Expert Center

P3DP established the PIEC in collaboration with AmCham in Ukraine, and with support from the MOEDT and MRDCH. It serves as serves as a platform for private sector and other stakeholders to collectively advocate for legislative and policy reforms needed for the development of PPPs in Ukraine. In addition, it creates a sustainable mechanism that unites governments and investors in the development of viable PPPs in infrastructure and public services.

Enhancing GOU Knowledge and Skills of PPPs

P3DP helped the PPP Unit and other government staff gained PPP-related knowledge and skills through participation in tailored, practical workshops, study tours and conferences to learn first-hand from relevant PPP practitioners and the experiences of those involved in the set-up and operations of successful PPPs in neighboring countries.

In addition, P3DP provided focused consultancies to apply acquired knowledge to PPP project evaluation and approval. P3DP also reached officials by contributing to working groups in various GOU bodies, such as the Verkhovna Rada Committee on Industrial Policy and Entrepreneurship, the National Commission of Communal Utilities Tariffs Regulation, and the Sea Ports Infrastructure Renovation Working Group led by the Deputy Minister of Infrastructure. These resulted in several important successes:



Representatives of Varazdin, Croatia, discuss successful examples of PPPs implemented in their country with study tour participants.

- A study tour to Vinnytsia Region, combined country with study tour participants.
 with PPP training for officials from Ivano-Frankivsk, led to the replication of a SWM PPP aimed at generating electricity from landfill gas.
- A study tour to Turkey (Istanbul and Ankara) in September 2014 resulted in the
 organization of an international PPP conference in Kyiv (November 27, 2014) focusing
 on lessons of experience from Turkish PPPs, which generated a great deal of interest
 among Ukrainian officials. Earlier, a study tour to Poland (November 2013) highlighted
 ways that PPPs can support infrastructure development.
- P3DP also demonstrated how PPPs can support e-Government, a key tool being pursued by the GOU for combatting corruption.
- P3DP also demonstrated how PPPs can provide for long-term housing and healthcare needs of IDPs through participation in working groups, conferences, and studies

conducted by experts conducted in Kharkiv, Dnipropetrovsk and Odesa during the period of April – July 2015.



P3DP Study Tour Participants at the Municipality of Ankara after the formal presentation of the city's PPP Projects and activities

OBJECTIVE 3: DEVELOPING PUBLIC AWARENESS AND STAKEHOLDER CAPACITY TO IMPLEMENT PPPS

Accompanying the growing importance of PPPs in Ukraine, is the recognition of the significant shortage of human resources needed for their successful implementation. This trend was increasingly prevalent during the final year of P3DP, as evidenced by the growing number of training and consulting requests from government ministries, agencies, and municipalities interested in exploring and introducing PPPs. P3DP tailored its assistance to respond to these requests and, as importantly, prepared Ukrainian PPP educators and consultants to provide similar services in the future. P3DP also created an on-line PPP course and a broad range of practical PPP training resources.

For PPPs to take root in Ukraine, government officials, potential private partners, NGOs, the mass media and the general public must have an awareness and understanding of PPPs and the benefits they can bring. National and municipal officials also require the knowledge and skills necessary to design, implement and monitor PPP projects that are both attractive to the private sector and beneficial to citizens. To this end, P3DP conducted over 20 practical PPP trainings reaching over 2950 government and municipal officials, support staff, and the private sector. P3DP also supported and participated in nine conferences and seminars throughout the

country to increase awareness of PPP benefits and the importance of transparency throughout the process of creating and implementing the projects. Covering 11 pilot regions over five years (Vinnytsia, Lviv, Ivano-Frankivsk, Zhytomyr, Kyiv, Zaporizhia, Dniprpetrovsk, Odessa and Kharkiv regions, Simferopol and Western Crimea), P3DP worked closely with more than 50 top level government and regional authorities through organization of five international PPP educational study tours to Croatia, Russia, Poland, Austria and Hungary.

P3DP also conducted as series of "train the trainer" workshops for representatives of over 10 Ukrainian educational institutions currently or planning to introduce PPPs in their educational curriculum or deliver PPP trainings. To support these endeavors, P3DP developed a portfolio of knowledge products to support long-term PPP development in Ukraine. These include a PPP "Ukraine specific" textbook, ancillary course materials, case studies, guidance notes, educational videos, and other resources in Ukrainian language. The P3DP materials draw from international best practices but are grounded in



P3DP Trainer Ned White with participants from Ukrainian municipalities.

experiences learned during implementation of pilot PPPs and framed in Ukrainian legislation and regulations. These resources can be found on the <u>ppp-ukraine.org</u> website, which will remain online and available through 2020.

Growth in PPP Awareness

In 2011, P3DP conducted a baseline awareness survey so that changes in awareness, attitudes and needs related to PPPs could be measured among local governments, businesses, NGOs and the community. A second awareness survey was conducted in early 2014 to measure progress and guide P3DP assistance. A third and a final one was conducted in May-June 2015 to assess impact of the program and provide a basis for future technical assistance efforts to improve the PPP enabling environment in Ukraine. Overall, 1,743 responses were collected in the telephone survey from 130 cities, including seven PPP-pilot cities and seven non-pilot cities.

Key findings include:

- Where P3DP was active, awareness increased significantly. More than half of the respondents were able to define correctly a PPP compared with slightly more than onethird in 2011. PPP awareness increased among all respondent groups, though awareness of the existence and function of the MOEDT PPP Unit remains low despite a significant increase from 2011.
- The vast majority of the respondents (around two-thirds in each category) believes that involvement of the private sector through the public-private partnership mechanism could improve the quality of the public services and are ready to pay for such improvements.



P3DP's Chris Shugart explains how solid waste tariff methodology impacts the private sector's willingness to invest in landfills. P3DP worked with the national Commission of State Public Utilities to improve tariff regulations in the SWM

 Respondents strongly support wider usage of PPPs to deliver services to disabled, poor and other vulnerable groups, including internally displaced persons (IDPs).

Building PPP Knowledge and Skills

To develop PPP awareness, knowledge and practical skills of key stakeholders, P3DP conducted over 25 practical workshops and seminars, five study tours, nine conferences, and multiple roundtables and other activities that enhanced the capacity of over 50 government and municipal leaders to create and implement PPPs. The various P3DP trainings covered PPP fundamentals such as characteristics of viable PPP projects, the legal and regulatory frameworks governing their development, and the importance of transparency and effective stakeholder communications throughout the PPP process. Tailored practical workshops developed knowledge and skills needed to prepare feasibility studies; conduct financial analyses and modeling; and perform risk assessments.

Ukrainian-language PPP Training Materials

Through its capacity building objective, P3DP has developed a significant body of training materials that can be used to train officials, potential private operators, civil society, and other stakeholders about the design and implementation of PPPs in Ukraine.

PPP e-Learning PPP Course

In recognition that many public servants do not have the time to devote to traditonal trainging, P3DP developed an online e-learning course. This course is one of the many

sustainable knowledge resources on PPPs that P3DP developed. It can be access at http://moodle.ppp-ukraine.org.



P3DP's online PPP course in the Ukrainian language allows self-paced learning.

P3DP's PPP pilots.

By completing the course, participants will acquire fundamental knowledge about the design of PPP projects, what determines if they are financially viable, and management basics. The course incorporates the use of other P3DP guidance tools, such as case studies, sector briefs, sample documents and videos highlighting lessons learned during efforts to create and implement

PPP Video Case Studies

Video is an excellent way to share knowledge and experience, as well as to raise awareness of PPPs. P3DP created a series of case study videos highlighting efforts to create PPP projects in key public service sectors of Ukraine. The videos are designed to both promote PPP awareness and serve as training tools.

The video series includes:

- A First for Ukraine: Biofuel PPP in Malyn
- Reducing Urban Congestion: Lviv's Parking PPP
- Generating Energy from Waste: Landfill Gas PPP
- Rethinking Healthcare System: Role of PPP in Ukraine
- Revitalizing Urban Parks: Benefits that PPPs Bring, and
- What are Public Private Partnerships?

Ukrainian Language PPP Textbook

Recognizing the scarcity of Ukrainian-specific PPP education materials, P3DP prepared a PPP Textbook designed for use by higher education institutions and training organizations tasked with preparing public sector managers. The text book contains relevant legislative and regulatory information, national PPP policies, PPP case studies based on P3DP's experience, and sector-specific information, discussing opportunities and challenges to using PPPs in Ukraine to address infrastructure and public service needs.

Sectoral Reviews, Case Studies and other PPP Studies

P3DP learned a great deal about PPP opportunities, applicable legislative and regulatory constraints, and challenges to their successful implementation in various sectors. This information has been captured in materials prepared in both English and Ukrainian for the benefit of officials, potential private partners, and other stakeholders.

Sector Briefs describe the opportunities and challenges of introducing PPPs to improve infrastructure and the quality of public services in Ukraine. The briefs were prepared for the energy efficiency, solid waste management, public transportation, public parking facilities, social housing for IDPs, and education sectors.

Case studies describe the efforts of Ukrainian cities, which received P3DP assistance, to introduce PPP pilot projects, and are designed to be used in trainings and classrooms. They can also help accelerate PPP development by guiding municipalities through the gauntlet of regulatory and legal barriers, demonstrating the importance of effective stakeholder communication, and highlighting the value of transparency.

PPP Research describes key issues and present alternative approaches to improving infrastructure or addressing urgent public service needs in Ukraine. P3DP responded to specific requests of the GOU and stated priorities of municipalities. The research addresses key infrastructure and public service sectors in areas such as seaports; municipal waste; project financed (for infrastructure projects); irrigation PPPs; and transport. These can be accessed at ppp-ukraine.org.

Partnerships with Educational Institutions

To ensure that municipalities, government agencies and other stakeholders have access to PPP information and support in the future, P3DP is institutionalizing the trainings it developed by working with Ukrainian educational and training institutions to make the complete PPP course, case studies and guidance materials, free and openly available through the MOEDT and online at ppp-ukraine.org Over 10 institutions of higher education in Ukraine are already using P3DP materials in their classrooms. In addition to the Academy of Public Administration with branches in Kyiv, Odesa, Kharkiv, Dnipropetrovsk, and Lviv, P3DP materials are being used by Kyiv-Mohyla Business School, which has incorporated PPP modules into its MBA program; and Lviv Business School (LBS), which recently introduced a Master's in Public Administration program.

OBJECTIVE 4: ASSISTING MUNICIPAL EFFORTS TO CREATE REPLICABLE PPP PILOTS

The process of designing and implementing P3DP's Pilot PPP projects provided invaluable insights needed to improve the PPP legal and regulatory environment while creating replicable models that can be used to improve infrastructure and public services. The PPP analysis and guidance tools and PPP agreements created during their process development will serve as models to guide municipalities and government agencies working to create future projects. Case studies, videos, and sectoral briefs capturing key lessons learned while pursing the Pilots will be used by educational institutions and training organizations working to enhance the capacity of current and future government workers to design and launch viable PPPs. The importance of the role that the pursuit of Pilot PPP projects played in P3DP's success cannot be overemphasized.

P3DP supported the efforts of Ukrainian municipalities to create 10 Pilot PPP projects in "high priority" infrastructure and public services sectors covering 8 regions including ARC. Pilots in health, education, alternative energy, municipal waste, parks and recreation, and the transport sector were the focus of P3DP assistance. Technical assistance was also provided to government agencies evaluating alternative PPP approaches to introduce e-Government services, establish industrial or techno-parks, and address long-term needs of IDPs. The Pilot PPP in "renewable energy" is fully operational and is already being replicated. Lessons learned

and tools created to implement the "parks and recreation" pilot that is operational, coupled with lessons learned from another parks and recreation pilot that was readied for tendering in Crimea (which was abandoned upon the Russian occupation of the peninsula), are guiding park rehabilitation strategies in Kyiv and other cities. Pilot efforts in the municipal waste sector resulted in improved municipal practices and national policies, and P3DP guidance tools are the basis for PPPs now being pursued in the



New municipal boiler in Malyn providing heat to three schools, the result of a successful P3DP pilot PPP project.

municipal waste sector in Kharkiv, Kyiv, and other cities.

In addition to multiple municipalities throughout Ukraine, the Ministry of Health, Ministry of Education, and the Ministry of Infrastructure are all now applying lessons learned and guidance materials from P3DP experiences in their efforts to introduce PPPs.

Renewable Energy

In Malyn (Zhytomyr Region), P3DP guided the launch of the first PPP in Ukraine which fully complies with the regulations and prescribed procedures of Ukraine's PPP Law. Under this PPP, a private operator is using renewable biofuel burned in a municipal boiler house to heat three schools. This has reduced municipal heating costs by approximately 10 percent, reduced greenhouse gas emissions by an estimated 11,000 tons, increased Ukraine's energy independence from Russia, provided economic opportunities for local SMEs, and improved the learning environment for schoolchildren. The project began operations in November 2014.

The pilot was subsequently replicated in Oster (Poltava Region), in June 2015, where city leaders received guidance from the MOEDT's PPP Unit in adapting and applying the feasibility, financial, environmental and technical studies created by P3DP. They used the Malyn PPP agreement as a template. Other cities, including Kyiv, are currently evaluating the use of this approach to heat public buildings in order to gain energy independence and lower costs.

Parks and Recreation

Municipal governments in Ukraine typically do not have funds or management capacity to effectively maintain and operate sports and recreation facilities, including public parks with green areas. As a result, facilities in many public recreation areas are falling into disrepair. By engaging the private sector through PPPs, local governments can obtain the financing and operational expertise necessary so that the public can enjoy quality parks, sports facilities, and other recreational areas that otherwise would not be available.

P3DP supported two pilot PPP projects to demonstrate how PPPs can bring these benefits. The fully implemented Kyiv Summer Sports & Recreation PPP introduced new sports facilities and improved green areas. In Simferopol, the Urban Park Renewal PPP designed to introduce new concession and entertainment facilities and improve green areas was prepared for tendering but was not completed, due to the Russian occupation of Crimea.

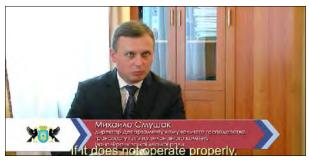


Misto Sportu is a new sports and recreation center on Hydropark Island in the heart of Kyiv. http://www.ex.ua/get/198561781

Leveraging the analysis, studies, agreements and other materials created during their preparation, P3DP supported the Kyiv Investment Agency in creating their city park rehabilitation strategy. P3DP also collected the primary information needed to analyze alternatives to rehabilitate Peremohy Park in Kyiv. P3DP assisted in preparation of financial models and provided narrative comments and step-by step instructions on how to adjust the model for use on other park projects.

Municipal Waste Management

The GOU aims to reform its highly-inefficient solid waste management sector. By involving the private sector through PPPs, government can reduce costs, increase recycling, introduce new technologies, improve management, and protect public health and the environment. P3DP has collaborated with the National Commission for Communal Services Regulation and the Ministry of Regional Development, Housing and Communal Services to establish a rational, clear, and consistent solid waste management (SWM) tariff methodology for the disposal of waste at



Mykhailo Smushak, Director of the Communal Utilities Department of the Ivano-Frankivsk City Council, explains the technology of solid waste management. https://www.youtube.com/watch?v=zDeYEfZIUGk&feature=youtu.be

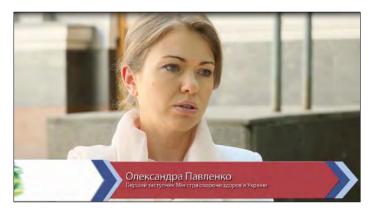
municipal landfills, an essential factor for successful public-private partnerships in the sector.

A promising component of a comprehensive SWM strategy is generating power by harnessing harmful methane gas produced by landfills. This approach not only produces energy, but reduces negative environmental impact and contributes to long-term maintenance and post-closure activities on the landfill. P3DP supported municipal governments in both Vinnytsia and Ivano-Frankivsk in their efforts to develop PPPs that harness biogas emissions as part of their comprehensive SWM systems.

The Vinnystia (City) Solid Waste Landfill Management, Gas Treatment and Electricity Generation Project was put on hold because of low interest by potential partners in the current economic environment. As a short-term measure, the City awarded the power generation contract to the existing landfill management firm, which had been flaring landfill gas emissions. P3DP's feasibility study and financial models were used by the City to make this decision, demonstrating the successful application of these tools by a municipal government to evaluate a PPP project and make sensible economic decisions based on them.

Health Care

The state-run healthcare system in Ukraine, which guarantees free healthcare to all citizens, faces serious constraints at every level. Funding, facilities, equipment and supplies are inadequate. Doctors are poorly paid and do not have access to modern equipment. Healthcare management is inefficient and encourages corrupt practices. The Ukrainian healthcare system provides poor service and places a heavy financial burden on the State. Patients also suffer because they have to pay doctors unofficially and buy their



Deputy Minister of Healthcare Olexandra Pavlenko describing the legal mechanism of PPP implementation in the sector. http://www.ex.ua/get/190989517

own medicine. Private sector funding, expertise and technology, mobilized through PPPs can help address these issues and improve the overall quality of medical services.

P3DP worked with the municipal government of Zaporizhia, supporting their effort to create Ukraine's first healthcare PPP. The project envisaged sharing hospital space with a private partner that would renovate facilities, procure modern equipment, and introduce new surgical techniques. If implemented, it would mobilize \$2 million over the 25-year life of the project. As a result of the war and untimely death of the deputy mayor, the project's champion, and a broad range of other issues, the PPP was not tendered. Regardless, the Ministry of Health is using P3DP research and analysis, feasibility studies and other tools as they work to implement reforms needed to make PPPs more viable in the health sector.

Transport

With steady increases in the number of cars per capita and poor urban planning, driving in Ukrainian cities has become increasingly difficult, and contributes to congestion, increases pollution, and reduces quality of life for Ukrainian citizens. The negative impact caused by the inadequacy of public transportation infrastructure is magnified by the lack of parking facilities.

P3DP addressed the parking challenge by assisting the city of Lviv in their efforts to create Ukraine's first parking management PPP for a multi-level underground garage. Despite many challenges, such as reforming parking legislation and improving enforcement of regulations, many municipal leaders from other cities expressed interest in the project to serve as a "roadmap", as they look for ways to address traffic and parking issues in their respective cities.

Education

Educational institutions in Ukraine have suffered from a rapid decline in population, a lack of funds, and low disposable incomes. Private sector participation in the education sector has the potential to help government better allocate existing and find new resources to improve the educational system. Education PPPs can help governments obtain the resources necessary to modernize, operate, maintain and manage educational facilities in partnership with the private sector, and allow school leadership to focus on the content and quality of education.

The Kyiv Education PPP demonstrated how, thorough due diligence during the design stage of a PPP, one can identify obstacles in a timely manner; thereby enabling government to restructure the concept in a more viable manner. City officials initially sought a PPP in which a private operator would build or renovate



a kindergarten that charges fees and manages it. Working with city authorities, P3DP completed business and financial models, market testing meetings, and legal reviews. P3DP's findings identified a financial "viability gap" and that a government subsidy would be necessary for the project to be attractive to private investors. They also revealed that under existing legislation, the transaction process would be lengthy and cumbersome. P3DP and the P3DP and the Kyiv City State Administration (KCSA) revised the PPP concept to contract out maintenance and operations of educational facilities in Kyiv's Podil district of Kyiv to a private sector operator. The operator is to provide utility, maintenance and related services to all education facilities on a long-term basis. The city of Kyiv continues to pursue this pilot.

A similar benefit was realized under the Kyiv Maintenance of Educational Facilities PPP, which went through several modifications as a result of a feasibility study and financial modeling exercise. The original model, for example, demonstrated that the project could not continue without municipal support.

Improving State Owned Enterprises



P3DP's scope of work for the no-cost extension (NCE) period of October 1 – December 31, 2015, responded to a request from the State Property Fund of Ukraine (SPFU) to conduct the Vendor's Due Diligence (VDD) on a high profile State Owned Enterprise (SOE), the Odesa Portside Plant (OPP). VDD is recognized as an essential component of the process to prepare any SOE for a fair, open, competitive and successful tendering by the SPFU, and to instill confidence in potential investors and the general public and assure them that the GOU

will be applying processes that are transparent and in-line with international best practices and standards as it implements their new privatization program focused on large SOEs.

Through a competitive process, P3DP engaged EY, an internationally recognized audit firm to conduct the VDD. They teamed with the Baker & McKenzie legal firm and iDeals, a provider of virtual data room services. A virtual data room was established for sharing of the SOEs legal, tax, and financial documentation with qualified investors and other appropriate parties. This consortium worked closely with UBS, the firm engaged by the SPFU to lead the privatization process and sale of the OPP. When the assignment was completed, a seminar was conducted to share lessons learned during the VDD preparation process with SPFU, USAID and other stakeholders in order to identify ways to improve the processes used to prepare other SOEs for privatization in the future.

Annex 14 contains the Subcontractor Report highlighting lessons learned during the VDD process and specific recommendations on how future efforts to prepare SOEs can be improved. The Vendors Due Diligence report and the "user's manual" guiding use of the Virtual Data Room are also included. The VDR will continue to be maintained by iDeals until the OPP is privatized (or 6 months, whichever comes sooner).

Mitigating Climate Change and Promoting Renewable Energy

P3DP played an important part in implementing USAID's Global Climate Change and Development Strategy in Ukraine. P3DP's multi-faceted approach helped create the conditions necessary for private investment, enhancing the capacity of individuals and institutions to create economically viable projects, and implementing PPP pilots that will serve as models for replication. The resulting framework supports Ukraine's transition to climate resilient low emission economic development. P3DP assistance positively impacted the national framework of policy and legislation needed to mobilize private investment in renewable and energy efficiency projects, strengthening needed individual and institutional capacities, demonstrated how private investment projects can mitigate global climate change.

Specific efforts by the Program that supported this goal include:

- 1. Improving the Legislative and Policy Framework: As a result of P3DP consultations and tailored research and policy recommendations, provisions promoting clean energy and energy efficiency are included in Ukraine's National PPP policy and reflected in draft and adopted legislation. These support the National Economic Reforms Program for 2010-2014. PPP-related laws, such as the budget code, were improved so that renewable energy and energy efficiency PPPs can be introduced. Specific examples where P3DP played a decisive role include:
 - Development of Draft Law #2010, On Amendments to Specific Laws on Competitiveness Conditions for Electricity Produced from Alternative Resources of Energy, which was

- approved by the Verkhovna Rada on June 3, 2015. The legislation improves methods of energy payment calculations for companies and facilitates PPP projects in SWM.
- Inclusion of provisions in the PPP Concept and Strategy for using PPPs to develop the energy sector, improve the resource and energy efficiency of the housing and communal sector, and protect the natural environment;
- Amendments to energy efficiency legislation that provide specific regulations for making ESCO contracts efficient for the public sector; and
- SWM tariff reform to accelerate the development and modernization of the SWM sector in Ukraine in ways that improve energy efficiency and reduce greenhouse gas (GHG) emissions. The proposed regulations provide for resources to be used to develop and manage landfills that meet modern environmental requirements.
- 2. Building Environmental Knowledge and Capacity: In addition to teaching approximately 200 national, regional and municipal representatives about the fundamentals of PPPs, P3DP demonstrated how the private sector can contribute to low emissions, and sustainable economic development through financing, technology, and managerial know-how. For example, P3DP's training program on the role of PPPs in the energy efficiency and renewable energy sectors targeted municipal officials and included representatives of other government agencies, private companies, NGOs and the mass media. The training was successfully conducted in Zhytomyr, Dnipropetrovsk, Ivano-Frankivsk, Kyiv, and Vinnytsia. These trainings were highly relevant to many P3DP pilot PPP projects involving extraction of landfill biogas for power generation and use of renewable biofuel, straw pellets, to generate heat for schools.
- 3. Demonstrating Clean Energy Development through Pilot PPP Projects: P3DP's pilot PPP projects will have significant and positive impact on greenhouse gas emissions and improved energy efficiency in Ukraine. Pilots in Vinnytsia, Ivano-Frankivsk, and Malyn are expected to demonstrate how PPPs can mitigate climate change by generating electricity with landfill gas and heat with biofuel. Estimated reductions resulting from U.S. Government assistance delivered through P3DP will be equivalent to 927,150 metric tons of CO². Reductions of electricity consumption generated from non-renewable energy sources, such as oil or coal, are estimated to be 230,989 MWh.

Project name	Estimated Reduction in GHG (Metric tons of CO ₂ equivalent)	Estimated reduction of electricity consumed, generated from non-renewable sources (kWh)	Period
Landfill biogas extraction PPP in	459,016	79,393,973	2019-2029

Vinnytsia			
Landfill biogas extraction PPP in Ivano-Frankivsk	456,705	78,994,325	2015-2025
Renewable energy for district heating in Malyn, Zhytomyr region	11,429	72,601,136	2013-2038
TOTAL	927,150	230,989,434	

These reductions are due to energy efficiency measures and substitution for non-renewable sources of energy. Demonstration effects could lead to much greater impact in over the long term. Given that over 100 landfills are in use throughout the country, PPPs have the potential to make a significant impact on the development of clean energy in Ukraine.

LESSONS LEARNED

The experience of promoting the development of PPPs in Ukraine gave P3DP a unique perspective of the challenges involved. Many of the lessons learned during the implementation of the Program will be relevant to future implementers of PPP projects. Officials, NGOs and developmental institutions interested in furthering PPP development in Ukraine in the future will find value in and draw upon P3DP's lessons of experience.

A strong, focused PPP Unit and high-level support in government are needed. PPPs involve shaking up established ways of conducting business for government bureaucracies. Experience in other countries shows how difficult it is to build a strong PPP program without, as a precondition, enthusiastic commitment and strong leadership from the highest officials in government. This was lacking in Ukraine from the very beginning of the Program. Related to this was the lack of a strong PPP Unit with a clear sense of its mission – and the resources to carry it out. Ideally, most of P3DP's activities should have been centered around (advising and supporting) a well-defined and strong PPP Unit, but this did not exist, and no effort of P3DP could have created one. In other countries, PPP advisors who address fundamental questions about policy, legal framework, guidelines, capacity building, and identification of PPP project ideas are often embedded within a PPP Unit. More careful attention should be paid to these important preconditions in planning future advisory work for PPPs in Ukraine.

Widely disseminated written documentation of different types facilitates long-term PPP knowledge dissemination. P3DP developed numerous training materials, videos, white papers, case studies, an online PPP course, and a textbook in Ukrainian language. These materials are in high demand and have proven to be an important leave-behind of P3DP. Given the lack of appropriate written material on PPPs in Ukrainian, this legacy of documentation will provide a good starting-point for the future development of PPPs in Ukraine.

Political stability is essential for PPPs. The long-term life cycle of PPPs (some PPPs last as long as 30 years) makes political stability especially important – particularly in a country where personality and politics still carry more weight than the stability of government policy and rule of law. This is a well-understood concept and is supported by P3DP's experience. The pilot PPP project in Malyn progressed relatively smoothly because city leadership was consistent and supportive in spite of the crisis enveloping the country as a result of Russia seizing control of sections of Ukrainian territory. Pilots progressed less evenly where political conflicts were more pronounced, such as in Zaporizhya and Lviv. P3DP suggests that any future program be initiated after the conflict in eastern Ukraine is resolved and a measure of political and economic stability has been restored.

Elements of PPP pilots were beneficial beyond the set-up of the pilots. The process for setting up P3DP pilots implemented at the municipal level involved numerous steps, which have

applications far beyond the pilot PPP itself. This includes feasibility studies, financial models, stakeholder communications, and market sounding events to measure investor interest, legislative reviews, and tender preparation. The very process of rigorous investment planning and appraisal was often new to the municipalities. Municipal officials learned a great deal about project evaluation from these activities, and, in some cases, applied the gained knowledge and developed tools to other approaches. In Vinnytsia, for example, the City used the pilot project analyses to determine that a PPP transaction would not garner sufficient competition to conduct a tender and, instead, as a temporary measure, persuaded the firm currently providing other municipal waste services to invest and introduce new services. This illustrates that an important part of PPP knowledge is knowing when *not* to do a PPP, as well as knowing when a PPP is the most appropriate approach.

A future program might benefit from broadening the scope to include public sector investment planning, privatization, and other government procurement options. PPPs are just one tool for government procurement of infrastructure and public services and possess features which also apply to privatization or regular government procurements, such as transparent tendering and rigorous project appraisal, including forward-looking cash-flow analysis. A future program could address the government's overall public infrastructure strategy, of which PPPs would be just one of a number of options for consideration. A broader government procurement program would include a capacity building component, so that officials are able to thoroughly analyze their options and select the most appropriate procurement mechanism for the specific case in question. Such an approach is in line with tendencies in other countries (e.g., the U.K.), where PPP development is being integrated more broadly into overall public investment planning and appraisal.

Program components should be more sharply defined. The four program objectives – essentially program components – benefited PPP development in Ukraine by tackling obstacles in a mutually-reinforcing way. For example, obstacles identified by pilot PPP projects helped focus legislative work to where it was most needed, such as on budget issues. Capacity building strengthened officials' abilities to develop and manage pilot PPP projects. However, the distinctions between different objectives were not always clear. Many tasks of Objective 2, mainly training and policy work, overlapped with Objectives 1 and 3. The establishment of the PPP Unit and the definition of its role could have been more effectively placed in Objective 1, which dealt with legislative and policy issues, while the ongoing training could have been more effectively placed in Objective 3, which dealt with capacity building. Other activities, such as studies on PPPs to address the needs of IDPs, did not fit into any of the defined objectives.

A more flexible program structure would enable the Program to adapt to changing conditions in the beneficiary country. Each of the program objectives described above was led by a manager. This structure served the Program well until the political and economic crises forced changes to the Program. These entailed detailed studies of specific issues where private

sector participation through PPPs could offer specific benefits to Ukraine. Studies included meeting the healthcare and housing needs of IDPs, industrial park development, and the management of ports. The topics selected were based on the immediate, urgent needs facing the government of Ukraine. P3DP was able to maximize its flexibility and responsiveness in an uncertain environment in the final year of the Program by procuring experts to work on specific issues, such as identifying opportunities for private sector participation in addressing housing and healthcare needs of IDPs. This flexibility proved valuable; a future program should include greater capacity for flexible programming than was initially envisaged.

Communications and media outreach can play a stronger role in strengthening the regulatory environment. Strengthening legislation is a long-term process. P3DP's approach was to participate in working groups, draft amendments to legislation, and hold discussions with policymakers. Greater momentum could have been achieved by developing closer relationships with journalists and providing them with more training. A higher number of articles in the press may have led to more public discussion on PPP-related issues and strengthened advocacy efforts.

Challenges

The increasing demand and urgency to build new or rehabilitate existing infrastructure and improve public services in this environment outweighed the risks. Over the course of P3DP, the Program was the legal and regulatory environment improved, institutional support enhanced, and PPP pilot projects implemented. Despite these success, few PPPs are under development in Ukraine at present, primarily due to:

Absence of motivated decision makers and political stability. It is still challenging to find a progressive mayor, or head of a government agency, who recognizes the value of engaging the private sector through PPPs to improve infrastructure or public services, and who genuinely wants to carry out a fair, transparent and competitive procurement process to select a private partner. It is even more difficult to find one that has the ability to carry this to fruition within an organization or city. The long-term life cycle of most PPPs, some lasting as long as 30 years, makes political stability especially important – at least in a country where the sanctity of contract and effective contract enforcement cannot yet be taken for granted. Certainly political stability is crucial in any country during the project preparation phase; it is well known that the preparation of a controversial PPP project should be timed so that the deal can be closed before the next election. If a political "champion" is supporting the development of a PPP, there is a risk that they will lose their position of influence during the project's development phase or later during implementation; putting the project and the private partner's investment at risk. P3DP's pilot PPP project in Malyn progressed smoothly because the city leadership remained consistent and supportive, despite the crisis that unfolded in the East. In cities where champions of PPP pilots lost their positions, such as in Zaporizhia and Crimea, progress of PPP pilots was delayed or ceased completely.

- Lack of access to transaction support needed to develop and implement viable PPPs. If a public sector champion has the interest and influence to create a PPP, they do not have access to the expertise needed to develop the project. There is no institutional support within the government structure that has the capacity to advise on and support municipalities and government departments in preparing good practice PPPs, or even able to determine if a PPP is the best mechanism for implementing a proposed project. It is not the intended role of the PPP Unit in Ukraine to provide the transaction advisory services needed by agencies and municipalities – and this is in keeping with good practice in other countries. In some countries, however, an important role of a PPP unit is to provide more general support to line ministries and municipalities in preparing PPPs and to help them locate and find funds to pay for specialized transaction advisory services. MOEDT decided that it would not be productive for the PPP Unit to to take on this role given the administrative culture between MOEDT and the line ministries and municipalities; in some cases characterized by considerable tension and distrust. Thus, as P3DP draws to a close at the end of 2015, there are no resources to continue to support these capacity building efforts, unless international donors provide this assistance on a project-by-project basis. Government departments and municipalities simply cannot do this on their own at present. Failed efforts to develop roads and ports through PPPs demonstrate this inability to follow the process to the end without continued support to fully build out this capacity within specialized government departments at the national and local levels.
- Poor business climate and rule of law. Even if a "champion" public leader receives needed transaction support and makes progress in creating a viable PPP concept, Ukraine's business environment makes it extremely difficult to attract potential private investors or partners. Improving the rule of law and establishing reliable, competent, and fair dispute resolution in Ukraine is essential. Without this, who can rely on a written long-term contract? PPPs, by definition, are based on long term contracts. Without effective dispute resolution mechanisms for contract disputes, only certain kinds of long-term contracts will be entered into by the private sector (namely, those that are "self-enforcing" e.g. where the private company can take its important assets away if the contract is put in jeopardy). Although the new leadership in Ukraine has accelerated the reform process, the court system responsible for enforcing contractual agreements remains extremely corrupt. Even if further improvement of PPP legal and regulatory environment is achieved, private sector actors are not confident that their investments will be secure, contracts will be honored, or that there are viable contract dispute resolution mechanisms in place.
- **Difficulties in financing PPPs**. Most PPPs involve significant investments in infrastructure. This requires long-term financing, both debt and equity. Even before the

Maidan events and the conflict with Russia, it was virtually impossible to find financing with sufficiently long maturities, except from international financial institutions like the EBRD and IFC. Moreover, Ukraine's high country risk premium made the cost of financing – and hence the cost of the services to be provided under the PPP – very expensive. These problems have restricted the kind and number of PPP projects that were feasible, especially at the municipal level.

With GOU priorities undergoing significant changes over the course of the past five years in response to unforeseen events, it was necessary for P3DP to remain flexible and adapt its Program activities to accommodate the country's new challenges and needs that arose.

NEXT STEPS FOR PPPS IN UKRAINE

Ukraine in 2015 remains a country in conflict and mired in an economic crisis. It is, however, on a democratic path and has maintained an orientation towards Europe. Reform efforts are underway, and Ukraine's international partners are working with it to resolve both the military and financial crises.

The conflict significantly increased the need to build new infrastructure and better manage delivery of infrastructural and public services in Ukraine, particularly for IDPs. Given the lack of funding, technology or managerial capacity, the government clearly needed the private sector to deliver on its "social contract." The provision of basic infrastructure and public services, through PPPs and other methods, is a key condition for economic development, and a critical step towards building credibility, legitimacy, and promoting stability and growth. These factors are particularly important for the Donbas region.

The urgency of these issues creates unique opportunities to accelerate reform and bolster the case for greater private sector engagement in post-conflict development of infrastructure and public services through PPPs. Well-structured PPPs will:

- Enable the government to leverage its own budget with private sector financing;
- In the case of PPP projects that are substantially remunerated by user charges, enable the government to increase fiscal space;
- Provide access to private sector strengths, including financing, technology, management skills, greater efficiency, flexibility and speed;
- Give greater assurance that infrastructural assets will be adequately maintained over the long term; and

• Transfer risks to those best positioned to manage them, for example, construction and operational risks, which are best assumed by the private sector.

The use of donor assistance has also been successful in many post-conflict environments, for example, in the restoration of power infrastructure in Liberia. Donor engagement provides comfort to private sector investors and operators in risky environments. Through mechanisms such as output-based contracts, donor funding can help governments develop infrastructure and provide public services in partnership with private operators in challenging environments. Although they can be more complex to develop and implement, PPPs that make use of "blended financing" (from both the private sector and donors) offer considerable promise.

The potential benefits of the rehabilitation of infrastructure and restoration of public services are essential in that:

- Rebuilding infrastructure quickly creates jobs, improves access to welfare-raising goods and services, and attracts capital into areas otherwise unlikely to do so;
- Restored infrastructure and services contributes to economic growth necessary to secure a lasting peace; and
- Businesses can create jobs for frustrated citizens, bridge social divides, and restore confidence in Ukraine's new government, thereby helping to mitigate a return to war.

The private sector can be instrumental in improving the size and efficacy of expected capital flows into Ukraine. Private sector participation adds capital, expertise and focus. Well-structured PPPs can include proper incentives to significantly decrease both short-term and long-term problems. Despite the difficult conditions in the Donbas, it is possible for the GOU to define workable and desirable PPP arrangements that will help to achieve infrastructure and service goals and attract local and foreign capital and expertise. By making the appropriate policy decisions and correctly assessing its institutional and supervisory capacity, the GOU can find the right degree of private sector involvement for each area of infrastructure that needs to be rebuilt.

PPPs will be more attractive once peace and stability are restored. It is essential for the international donors and financial institutions to strongly support the use of PPPs in rehabilitating infrastructure and restoring public services in Ukraine. Involving the private sector in the initial stages of the rebuilding process can mitigate many of the immediate and later problems commonly associated with post-conflict environments.

In the meantime, Ukraine will benefit from an overall strengthening of its planning, budgeting, and procurement systems – for both public sector investments and PPPs – and improvements to the overall business and investment climate. To further PPP development in Ukraine, P3DP recommends that the government, donors, development institutions, NGOs and others with the

necessary resources consider the following as they develop strategies for promoting PPP development:

- Maximizing the use of contracting out for services, including those of local small and medium-sized businesses. By bringing in the private sector through management or output-based contracts in the short term, even in cases where government directly finances urgent infrastructure construction (such as roads), both the government and private sector will develop productive working relationships. Contracting out and PPPs lie on a continuum: the skills needed to do either of them well are very much the same.
- Continuing to build the legislative and institutional framework for PPPs. This
 will enable the private sector to engage in longer-term projects more quickly once
 Ukraine has achieved stability, both politically and in terms of renewed conflict with
 Russia.
- Strengthen PPP institutions, including PIEC, working groups, and PPP programs
 at business education institutions. These should include governmental bodies as well
 as major developmental players, including the World Bank Group and USAID. An
 important part of this work is to further develop PPP resources in Ukrainian. P3DP
 has developed a foundation of material for building knowledge about PPPs and has
 made it widely available; however, institutions will need to further develop this body
 of knowledge.
- Rethinking the role, functions, and structure of the PPP Unit to lead PPP policy and development going forward. From the beginning (and despite P3DP's best efforts), the PPP Unit was ill-defined and weak, and high-level ministry officials took little interest in thinking through what its role and features should be. Political turmoil in Ukraine and reorganization of the MOEDT prevented the PPP Unit from developing thereafter into an effective body during the life of the Program. As Ukraine stabilizes politically and economically, the MOEDT should make a more concerted effort to rethink the functions and institutional design of the PPP Unit and to further professionalize it so that it can play the developmental role initially envisaged.
- Explore role of private sector through PPPs for any area where Ukraine faces challenges. P3DP's focused studies implemented in the final year of the Program, were well received and helped publicize the value of private sector participation in Ukraine's development. P3DP studies included healthcare, housing, ports, industrial parks, transportation, and education; all areas where Ukraine faces major challenges today.

- **Maximizing replicable PPPs**, for example, in using biofuel as a substitute for Russian natural gas for heating.
- Providing guarantees for government payments to private sector partners (for well-vetted, sound, and economically beneficial PPP projects) to increase the willingness of private operators to engage in PPPs.
- Addressing social needs, such as healthcare or refugee resettlement services for IDPs, through PPP-like arrangements with NGOs.
- Developing media capacity for better coverage of PPP-related issues in the press, as well as include strategic communications in PPP training programs for officials and other practitioners.

For Ukraine to restore its economy, become politically stable, and provide for its citizens, it must rebuild its infrastructure and provide critical public services. Under current circumstances, it cannot do that without private sector engagement. PPPs are now positioned to enable the Ukrainian government, in partnership with the private sector, to meet these obligations.

ANNEXES

- 1. P3DP Quarterly and Annual Reports
- 2. Monitoring and Evaluation Research
 - a. Study #1: Base-line Survey and Central Government Survey 2013
 - b. Study #2: Follow-up Survey 2014
 - c. Study #3: Assessment of PPP Awareness, Attitudes, and Abilities 2015
 - d. P3DP Final Monitoring and Evaluation Report
- 3. PPP Policy, Regulations and Legislation
 - a. Concept of PPP Development in Ukraine
 - b. PPP Strategy and Strategy Implementation Plan for 2013-2017
 - c. Amendments to CMU Regulatory Acts
 - i. PPP Appraisal Methodology
 - ii. PPP Risk Assessment Methodology
 - iii. Concession Payment Calculation Methodology
 - d. SWM
 - i. Methodology on Regulation of Landfill Tariffs for Household Solid Waste (2 versions)
 - 1. Landfill Closure Provisions
 - 2. Methodology Wrapping Note
 - ii. Major Directions on Kyiv SWM Program Development
 - e. Tariffs: PPPs and Tariff Regulation in the Water, Wastewater, and District Heating
- 4. Reports: PPP International Study Tours
 - a. Croatia
 - b. Russian Federation
 - c. Hungary, Austria, Poland
 - d. Turkey
- 5. PPP Guides
 - a. PPP Practical Guide
 - b. PPPs in E-Government Guide
- 6. PPP Studies
 - a. Diagnostic Review of Legal and Regulatory Framework for PPPs in Ukraine
 - b. Most Critical Legislative Issues Relevant to PPP Project Startups in Ukraine
 - c. Legal Report: Construction and Operation of Kyiv City Ring Road
 - d. Report on Progress of the PPP-related Legislative Initiatives
 - e. Analysis of Sea Ports Terminal Operation: Essential Terms of Project Conditions (Oktyabrsk Port)
 - f. Review of Policy, Legal and Institutional Framework for Industrial Parks in Ukraine
- 7. IDP-related Research
 - a. Result-Based Approaches to Deliver Durable IDP Solutions in Ukraine
 - b. PPPs in Support of Health Services for IDPs in Ukraine

- c. Facilitating Private Sector Participation in Delivery of Humanitarian Aid and Infrastructure in the Housing Sector Laying a Foundation for PPPs
- 8. PPP Learning
 - a. PPP Textbook
 - b. Online PPP Course Materials
- 9. Guidance Notes
 - a. Unsolicited Proposals and Single Bidders in Relation to PPPs
 - b. Fiscal Control and Municipal PPPs
 - c. Dispute Resolution and Municipal PPPs in Ukraine
 - d. PPP in Agriculture: International Lessons Learned and Opportunities for Ukraine

10. PPP Sectoral Briefs

- a. Parks and Recreation
- b. Social Housing for Internally Displaced Persons
- c. Healthcare Management
- d. Parking Construction
- e. Education
- f. Transport Infrastructure

11. PPP Case Studies

- a. Kyiv Hydropark Sports Facility
- b. Ivano-Frankivsk and Vinnytsia SWM and Landfill Energy Extraction
- c. Malyn Biofuel Heating
- d. Zaporizhia Health
- e. Lviv Parking
- f. Simferopol Park
- g. Kyiv Education

12. P3DP Videos

- a. A First for Ukraine: A Biofuel PPP in Malyn
- b. Reducing Urban Congestion: Lviv Parking Public-Private Partnership Project
- c. Getting Energy from Waste: Landfill Gas PPP Project
- d. Rethinking Healthcare System: Role of Public-Private Partnerships in Ukraine
- e. Revitalizing Urban Parks: Benefits that Public-Private Partnerships Bring
- f. What is Public-Private Partnership
- 13. Listing of PPP Project Concepts being developed by Ukrainian municipalities and other stakeholders
- 14. No-Cost Extension: Odessa Portside Plant "Vendor's Due Diligence' Materials