

**PILOT LOCAL GOVERNMENT
PARTNERSHIP PROGRAM**

**ENTERPRISE FINANCIAL
ANALYSIS OF WODKAN, S.A.**

**OSTRÓW-WIELKOPOLSKI,
POLAND**

(ENGLISH VERSION)

Prepared for



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Prepared by

Marcin Szpak
Marek Zabost
DS Consultants

under subcontract to

The Urban Institute



THE URBAN INSTITUTE

2100 M Street, NW
Washington, DC 20037
(202) 833-7200
www.urban.org

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EXECUTIVE SUMMARY

INTRODUCTION

Under the Pilot Local Government Partnership Program (Pilot LGPP), USAID has been providing assistance to Ostrow-Wielkopolski and two of its enterprises - the water and sewer utility (Wodkan) and the bus transport company (MZK) in the area of enterprise finance. This report presents the results of the financial analysis of Wodkan, s.a.

During May LGPP advisors working in the area of municipal and enterprise finance visited Ostrow-Wielkopolski to discuss coordinating the application of tools and technical assistance in four areas of municipal finance. A presentation of the enterprise financial condition model was made to President Kruszyński, Vice President Kierstein, Secretary Krakowski, Treasurer Fraszek, Holdicom Director Kupijaj and Presidents and representatives from the water, bus transport, central heating and solid waste enterprises. The model is a tool used to project the financial condition of an enterprise and develop a financial plan, considering alternative strategies for capital investment, financing and pricing.

At the conclusion of the presentation, Mayor Kruszyński requested assistance from the Pilot LGPP advisors in applying the enterprise model to as many enterprises as possible and he informed presidents of the various enterprises that they would need to present such financial analysis in support of future requests for price increases to the Gmina Council.

It was decided that the model would be applied in two enterprises - Wodkan and MZK. The Mayor requested that gmina staff and representatives from other enterprises be given as much exposure as possible during the process so that they would also be able to apply the model. Pilot LGPP advisors began working with the two enterprises in May.

This report presents the financial analysis of Wodkan, s.a. A summary of the findings is included in this executive summary. Section I presents a profile of the company. Section II discusses assumptions used in making the projections. Section III presents results of several alternative strategies that were evaluated and conclusions.

SUMMARY OF FINANCIAL ANALYSIS

Wodkan has prepared a capital investment plan which identifies several major investments needed in the near future. The most significant capital investment projects included in the plan are a new wastewater treatment plant and pumping station. The company had assumed that the gmina would pay for the wastewater treatment plant and that it would finance the pumping station through a loan from the regional environmental fund. However, in the course of prioritizing capital investment projects and applying the gmina financial analysis model to determine the financial situation of the gmina, the gmina identified other capital investment projects that are considered to be higher priority. The gmina simply cannot afford to fund all of the projects it has identified as important and officials expressed the desire to see Wodkan finance as much of the wastewater treatment plant as possible from its own funds or by borrowing on its own. Gmina planners designated a limited amount of funds available to finance Wodkan projects.

In developing a financial plan for Wodkan, three scenarios were considered. Projected demand, operating and maintenance expenses, capital investments, co-financing of certain projects by residents and a certain amount of equity investment by the gmina to fund capital investments was common to all three scenarios.

The first scenario assumes that Wodkan's prices would increase with inflation - in other words, there would be no real increase in prices over the ten year projection period. Wodkan would borrow to the extent it would probably be allowed, maintaining a debt service coverage ratio of at least 1.2 (calculated as annual cash from operations divided by the total of principal and interest payments). It was assumed that Wodkan would borrow from the regional environmental fund with a financing term of 6 years, an interest rate equal to 70 percent of inflation and a one year grace period from the date of loan origination during which no principal payments, only interest payments would be due. The resulting cash flow shortfall would be funded by the gmina, in the form of an increase in its equity share of the company. Under these conditions, the gmina would be required to provide investment funds to Wodkan of approximately eight times the amount gmina planners had identified in the gmina financial analysis model. This scenario was therefore considered unacceptable. Results for Wodkan, its customers and the gmina under this scenario are shown in Section III, Exhibits 3 a through e.

The second scenario assumed that Wodkan would receive only the amount designated by gmina planners in the gmina financial analysis model for investment. It would then need to fund capital investments through a combination of funds generated from operations and borrowing. Again it was assumed that a debt service coverage ration of at least 1.2 must be maintained and Wodkan would borrow from the regional environmental fund under the terms described above. Prices would need to increase significantly over the next several years in order for Wodkan to be able to afford to service its debt. The

price increases would probably not be politically acceptable and they may be considered illegal under current Polish laws and regulations on pricing water and sewer services. This scenario was also considered unacceptable. Results for Wodkan, its customers and the gmina under this scenario are shown in Section III, Exhibits 4 a through e.

The final scenario is one in which Wodkan is able to finance under more favorable terms than those described above. The assumption is that a ten year loan will be granted. Price increases would not need to be as high as in the second scenario, but would still exceed inflation. The price increases required under this scenario would be allowable according to law and are much more politically acceptable. This third scenario is the only one of the three that appears viable for Wodkan and the gmina. It will require that Wodkan negotiate more favorable loan terms than management had projected, but we believe it will be possible to do so. There is at least one recent examples of a longer term loans being granted by the national environmental fund for a wastewater treatment plant. Results of this scenario are shown in Section III, Exhibits 5 a through e.

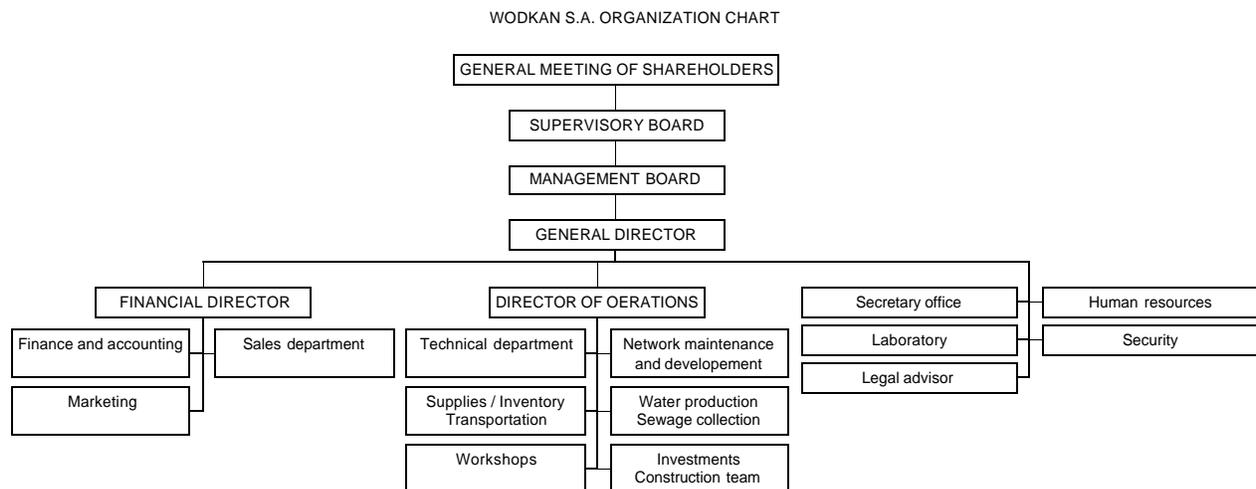
**OSTROW-WIELKOPOLSKI
WODKAN, s. a.
ENTERPRISE FINANCIAL ANALYSIS**

I. PROFILE OF COMPANY

Wodkan, s.a. has been operating as a joint stock company since the beginning of 1996. The gmina of Ostrow-Wielkopolski owns the majority of the shares in the company through its enterprise holding company (HOLDICOM s.a.). In 1996 and 1997 the company broadened participation in ownership by issuing shares of stock to citizens interested in receiving service on newly constructed portions of the sewage network system. Wodkan s.a. is in the process of registering its shares on the Over The Counter market so that shares may be actively traded.

Wodkan's organization chart is shown as Exhibit 1. Marta Bis has recently joined Wodkan as President. Other members of the management team who worked with the Pilot LGPP advisors in preparing this financial analysis include the Director of Finance and Economics, Jerzy Jankowiak, Engineering manager, Marion Kupijaj, and the Chief Accountant, Anna Serbakowska.

Exhibit 1: WODKAN S.A. Organization Chart



There are 151 employees, organized around the following primary activities:

- Water supply, pumping and treatment
- Water transmission and distribution
- Water meters
- Wastewater collection
- Wastewater pumping
- Wastewater treatment and disposal
- Repair and maintenance workshops
- Overhead and administrative departments

Water Supply, Treatment, Transmission and Distribution

Wodkan provides water service to virtually all residents and commercial enterprises of the gmina of Ostrow-Wielkopolski. In addition, two neighboring communities (Raszkow and Ostow) are provided water on a bulk sale basis. Most industries in Ostrow-Wielkopolski receive only potable water from Wodkan, but have their own wells for water used in production. The company has over 10,000 agreements with customers, including five with housing cooperatives.

Wodkan receives its water supply via deep wells. Two new deep wells were added over the past two years so that reserves are sufficient through the year 2010, according to company projections. The company conducts geological research on an ongoing basis for planning purposes.

The water treatment plant was placed in service in 1994, financed by a loan to the gmina from the regional environmental fund. The treatment plant employs a technology specially developed by Wodkan engineers for mechanical removal of toxic chemicals. The plant has sufficient capacity to serve the needs of the residents and businesses of Ostrow-Wielkopolski and some neighboring communities for the foreseeable future.

Wodkan's water transmission and distribution network includes approximately 336 kilometers of pipes. To improve pressure in the system and efficiency in pumping, Wodkan plans to add approximately 2 kilometers of mains per year in order to complete looping of the system.

Over the past two years the company has made substantial progress in reducing water losses. Meters were installed for all customers. The company has acquired the technical equipment so that it is able to respond quickly to line breaks and, therefore, minimize losses. In addition, the water treatment plant includes facilities for reuse of water used in the treatment process. Water losses are now below 10 percent.

Wastewater Collection, Treatment and Disposal

Wodkan collects wastewater within the gmina of Ostrow-Wielkopolski, but at the present time does not serve all residents of the gmina. There is a 10 to 15 year plan to extend the collection network to serve all residents of the gmina. The existing network consists of approximately 94 kilometers of mains. Lift stations are located throughout the system to convey the wastewater to the central pumping station or to the point of outfall to the river. Wodkan plans to add approximately 3 kilometers of collection mains per year plus necessary lift stations. A large diameter collector will be added at ul. Poznanska. A portion of the new collection system will be financed by participation in shares of the company by citizens connecting to the system.

Wodkan collects wastewater from all industries in Ostrow-Wielkopolski, even those with their own wells for production water. In addition, Wodkan has entered into an agreement with the neighboring community of Raszow whereby Wodkan will collect, treat and dispose of wastewater from the community in exchange for the use of land on which the wastewater treatment plant is located. Raszow will pay for the service. Wastewater customers are billed based upon metered water usage.

Wodkan is planning to construct a new wastewater treatment plant, beginning in 1997. The existing wastewater treatment plant, which has been in operation since 1908, has insufficient capacity. At the present time only about 20 percent of the sewage collected receives primary treatment prior to being disposed of by out fall to a river. The new plant is designed to provide mechanical/biological (secondary) treatment. In addition, a new pumping station will be constructed to convey all wastewater collected to the new plant.

The gmina has been paying fines to the voivodship based on the amount of untreated or inadequately treated wastewater entering the river. In 1996 the payment amounted to 50,000 PLN. In 1997 the amount increased to 450,000 PLN. Fines would be expected to increase in future years due to increases in both the amount charged per cubic meter and the increase in volume collected. However, the voivod may suspend fines for up to five years once construction of the new wastewater treatment plant begins. If the plant is operational within five years, the fines would be written off by the voivod.

Storm Water

Wodkan constructs stormwater collection trenches for the gmina in conjunction with expansion of the sewage collection network. In the newer parts of the city stormwater does not flow with wastewater to the treatment plant, but there is still some stormwater entering the treatment plant from collectors in the older part of the city.

Other Services

Wodkan receives revenues from ancillary services as well, including construction, laboratory, design, control and measurement, waste removal from septic tanks, transportation, and water hook ups.

Workshops, Garages, Shops

Wodkan has the following repair workshops: electrical, vehicle, general. In addition, there are storage facilities for gas, spare parts, 25 employees work in the workshops, garages and shops.

Customer Accounting and Metering

Wodkan bills customers for both water and sewer based upon the amount of water usage metered. Meters were installed throughout the system two years ago. Meters are read monthly and quarterly depending on the kind of customers and bills are issued accordingly. Customers make payment directly to Wodkan or through their bank. Housing cooperatives are metered per building and are responsible for allocating the total usage to residents within the building themselves. There are five employees who read meters and five involved in customer accounting and customer service.

Wodkan has been able to keep customer accounts receivable at a reasonable level. Customer agreements now allow the company to disconnect customers who do not pay water bills. Management is concerned that a drastic price increase in any one year may result in an increase in delinquency.

Administration and Overhead

Wodkan administration and overhead includes company management, accounting, engineering, customer service, purchasing, stores, computer systems and human resources. 45 employees are involved in these support activities. The facility in which Wodkan's administrative offices are located is approximately 100 years old and is in need of renovation and refurbishment.

Regulation

Wodkan's prices must be approved by the Gmina Council. The last price increase took effect in February 1997. Prior to that, prices were increased in July 1996. Prices must be set in accordance with national laws, which allow for inclusion of operating and maintenance expenses, depreciation, income tax expense and a profit margin. Prices are

subject to review by the Office for the Protection of Consumers and Competition (the Anti-monopoly office). This office also reviews Wodkan's service contracts with its customers.

II. PROJECTION ASSUMPTIONS

Usually at least two years of actual data would be presented along with the current full-year budget and this actual data would be used as a basis for making projections. In the case of Wodkan, s.a. / Ostrow-Wielkopolski, the company was restructured during 1995 from a budgetary enterprise to a joint stock company. At that time there were considerable changes to operations as a result of the restructuring and the introduction of the new water treatment plant that same year. For this reason, only one year of historical data (1996) is presented along with the full-year budget for 1997. This data has been used as a basis for making projections.

Most of Wodkan's revenues are generated from provision of water and wastewater service. The first step in making financial projections is to project customer demand.

The following factors were taken into consideration when preparing a forecast of demand for water and wastewater:

- Present usage by each class of customer
 - Residents
 - Commercial
 - Industrial
 - Bulk sales to neighboring communities

- Expected changes in patterns of usage
 - Resulting from water conservation / reaction to price increases
 - Resulting from changes in pressure on the system
 - Resulting from expected increases or decreases in water losses
 - Resulting from expected increases or decreases in infiltration and inflow to the sewage network

- Projected extensions of the water transmission and distribution network

- Projected demographic changes
 - Population increase or decrease
 - Planned new housing developments
 - Economic development in the community - new industry

Since virtually all residents of Ostrow-Wielkopolski are presently served by Wodkan, no increase is projected as a result of network extensions. Water usage per resident has dropped in recent years with the introduction of meters to all customers and with the reduction in water losses. Company managers estimate that water usage will not decline further. No major changes in population are expected in the community. Likewise, no major economic development (residential, commercial nor industrial) is expected that would significantly affect water or wastewater usage.

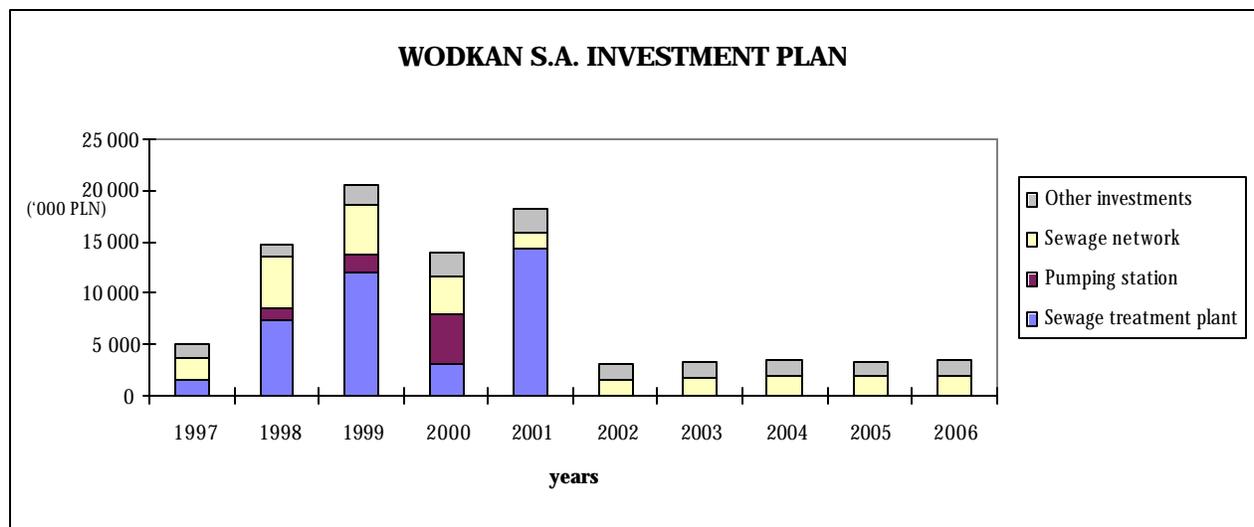
The major activities involved in providing water and wastewater services were identified as follows:

- Water supply, pumping and treatment
- Water transmission and distribution
- Water meters
- Wastewater collection
- Wastewater pumping
- Wastewater treatment and disposal
- Repair and maintenance workshops
- Overhead and administrative departments

Capital Investment Plan

Wodkan's capital investment plan is shown in Exhibit 2. Individual components of the plan are included in the relevant sections that follow.

Exhibit 2: WODKAN S.A. Investment Plan



Labor and Related Expenses

Operating expenses are projected by activity. Labor costs are divided into three categories within each activity: (1) gross salaries, (2) bonuses and other payments on behalf of workers and (3) payroll related charges (including ZUS, PFRON and unemployment). Given the total budgeted wages (including the 13th month wage payment) for each activity and the number of employees, an average wage per month per worker is calculated. The average wage per worker is projected to increase each year by inflation plus 2 percent (e.g., in 1998, inflation is projected to be 15 percent; therefore the average wage is projected to increase by 17 percent). This assumption is based upon the increase established by the national trilateral wage commission for 1997.

The number of employees projected for each activity is based on discussions with management. In most activities no increase in workers is expected. When each phase of the new sewage treatment plant is placed in service, there will be an increase in employees - 5 when the first phase of the treatment plant is placed in service and 2 when the second phase is placed in service.

Payroll related taxes, including ZUS and unemployment, are calculated as a percentage of wages for the company as a whole as budgeted for 1997. No change in payroll tax rates is expected during the projection period. Therefore, the 1997 percentage is applied to projected wage expense in each activity to arrive at projected payroll tax expense each year.

Water Supply, Pumping and Treatment

No major capital investments are planned for water supply, pumping and treatment throughout the projection period. The water treatment plant was placed in service in 1994 and there is adequate capacity to meet the needs of Ostrow-Wielkopolski as well as any new users on the system for the foreseeable future. In 1997 Wodkan will complete work on a water intake station and a new workshop building. No increase in the number of employees in this activity is projected.

Payments are made to the voivod environmental fund for cubic meters of water withdrawn from wells and cubic meters of wastewater disposed. The environmental impact fees for water withdrawn vary depending on the class of customer - the fee for water used by residents is lower than that for industrial use. Wodkan management expects that the rate will be equalized for all types of customers by the year 2001 because there is no cost basis for the differentiation in fees. Base fees to the voivodship for water are projected to increase with inflation. The base fee is then multiplied by projected volume to arrive at the projected fees paid to the voivodship each year.

Materials and supplies used for water supply, pumping and treatment are calculated per cubic meter of water treated. The cost per cubic meter is projected to increase with inflation and is then multiplied by projected volume to arrive at projected expense. Energy expense is projected in the same way. Note that the cost of chemicals is included in materials and supplies, but is not separately identified and projected because it is a relatively immaterial cost for Wodkan s. a. due to the particular technology employed in water treatment.

Outside services, repairs and other costs are assumed to be fixed costs and are projected to increase with inflation.

The rate of VAT paid on materials and supplies, energy, repairs and services is calculated for 1997. The VAT rate is then applied to the total projected expense for these line items to arrive at projected VAT.

Water Transmission and Distribution

The capital investment plan includes expenditures to add approximately 2 kilometers of pipes per year to complete looping of the water transmission and distribution system. No additional customers will be served as a result of this extension, but pressure on the system will be improved and there should be some efficiencies in pumping. No change in the number of employees in this activity is projected.

Materials and supplies used in water transmission and distribution are calculated per kilometer of installed mains. The cost per kilometer is projected to increase with inflation and is then multiplied by projected installed kilometers to arrive at projected expense.

Outside services, repairs and other costs are assumed to be fixed costs and are projected to increase with inflation.

The rate of VAT paid on materials and supplies, repairs and services is calculated for 1997. The VAT rate is then applied to the total projected expense for these line items to arrive at projected VAT.

Wastewater Collection

The sewage collection network will be extended by approximately 3 kilometers per year over the next 10 to 15 years to serve all residents of Ostrow-Wielkopolski. Management believes that efficiencies in operations will accompany extension of the network so that the number of employees in this activity will not have to increase during the projection period.

Materials and supplies used in wastewater collection are calculated per kilometer of installed collection mains. The cost per kilometer is projected to increase with inflation and is then multiplied by projected installed kilometers to arrive at projected expense.

Outside services, repairs and other costs are assumed to be fixed costs and are projected to increase with inflation.

The rate of VAT paid on materials and supplies, repairs and services is calculated for 1997. The VAT rate is then applied to the total projected expense for these line items to arrive at projected VAT.

Wastewater Pumping

Included in this activity are operation and maintenance of the central pumping station as well as lift stations and smaller pumps throughout the collection system. At the present time, only a portion of wastewater collected is channeled through the central pumping station to the wastewater treatment plant. Wodkan's capital investment plan calls for replacing the existing central pumping station in conjunction with construction of the first phase of the new wastewater treatment plant. When the new central pumping station is placed in service, all wastewater will be pumped through the central pumping station to the new wastewater treatment plant. Despite this increase in volume of wastewater pumped,

management believes that no increase in the number of employees will be needed for this activity over the projection period.

Materials and supplies used for wastewater pumping are calculated per cubic meter of wastewater collected and pumped through the central pumping station. The cost per cubic meter is projected to increase with inflation and is then multiplied by projected volume to arrive at projected expense. Energy expense is projected in the same way.

Outside services, repairs and other costs are assumed to be fixed costs and are projected to increase with inflation.

The rate of VAT paid on materials and supplies, energy, repairs and services is calculated for 1997. The VAT rate is then applied to the total projected expense for these line items to arrive at projected VAT.

Wastewater Treatment and Disposal

At the present time, Wodkan is treating only approximately 20 percent of the wastewater collected at the existing "bioblok" wastewater treatment plant. This plant provides only primary treatment. The voivod environmental fund has been imposing fines on the gmina (approximately 450,000 in 1997) because of the inadequacy of both the volume treated and method of treatment. Wodkan has entered into a contract with the firm "Ekolog" for construction of a new wastewater treatment plant. The capital investment plan calls for constructing the plant in two phases, with construction to begin as soon as all necessary permits are received and financing is worked out.

When the first phase of the new wastewater treatment plant is placed in service, an additional five employees will be needed. These employees will be required to have a higher degree of technical capability than workers at the existing "bioblok" plant. Consequently, the average wage of these workers will be higher.

When the second phase of the new wastewater treatment plant is placed in service, an additional two employees will be needed, also at a higher average wage than the existing wastewater treatment plant workers.

The volume of wastewater treated will increase dramatically when the new wastewater treatment plant and the new central pumping station are placed in service. There will be corresponding increases in materials and supplies and energy expenses. Materials and supplies used for wastewater treatment and disposal are calculated per cubic meter of wastewater treated at the plant. The cost per cubic meter is projected to increase with inflation and is then multiplied by projected volume to arrive at projected expense. Energy expense is projected in the same way.

The environmental impact fees paid to the voivodship for wastewater disposed vary depending on the character of wastewater and degree of treatment. There is a justifiable basis for differentiation of these fees between residential and industrial users since industrial waste tends to be more concentrated and contain more pollutants. Management expects that the differentiation in fees for wastewater will continue throughout the projection period.

When the new wastewater treatment plant is placed in service, there will be a marked improvement in the quality of wastewater disposed by Wodkan. The base environmental impact fee per cubic meter is projected to decrease almost by 70 percent. Besides this change, base fees are projected to increase with inflation. The fee is then multiplied by the projected volume of wastewater to arrive at the projected environmental impact fees paid to the voivodship each year.

Outside services, repairs and other costs are assumed to be fixed costs and are projected to increase with inflation.

The rate of VAT paid on materials and supplies, energy, repairs and services is calculated for 1997. The VAT rate is then applied to the total projected expense for these line items to arrive at projected VAT.

Repair and Maintenance Workshops

This activity includes workers who repair and maintain Wodkan's office facility and fleet of vehicles. No increase in the number of workers in repair and maintenance workshops is projected throughout the projection period.

Materials and supplies, outside services and other costs associated with workshops are assumed to be fixed and are projected to increase with inflation. The rate of VAT paid on materials and supplies, repairs and services is calculated for 1997. The VAT rate is then applied to the total projected expense for these line items to arrive at projected VAT.

Repair and maintenance workshop expenses are allocated to water and sewer based on the percentage of customers.

Overhead and Administration

This category includes Wodkan's management, department supervisors, and employees involved in engineering, accounting, customer service, purchasing, computer systems, stores and human resources. No increase in the number of administrative and overhead employees is projected over the projection period.

All expenses not directly associated with the activities already described are included as overhead and administration. These include energy, materials and supplies, insurance, travel, advertising and promotion, VAT and other taxes and fees, repairs and other costs. All expenses are considered fixed and are projected to increase with inflation.

Overhead and administration expenses are allocated to water and sewer based on the percentage of customers.

Other Services

It is assumed that revenues from ancillary services, including construction, laboratory, design, control and measurement, waste removal from septic tanks, transportation, and water hook ups, will increase with inflation. A 10 percent profit margin is assumed for these services.

III. ALTERNATIVE SCENARIOS FOR FINANCING AND PRICING

Three scenarios were run to show the results of different pricing and investment strategies. Projection assumptions are as described in the previous pages in all three scenarios unless specifically mentioned below. Assumptions as to financing of investments and pricing are described and results are presented for each scenario in this section.

First Scenario - Prices Increase with Inflation and Gmina Finances Short-Fall

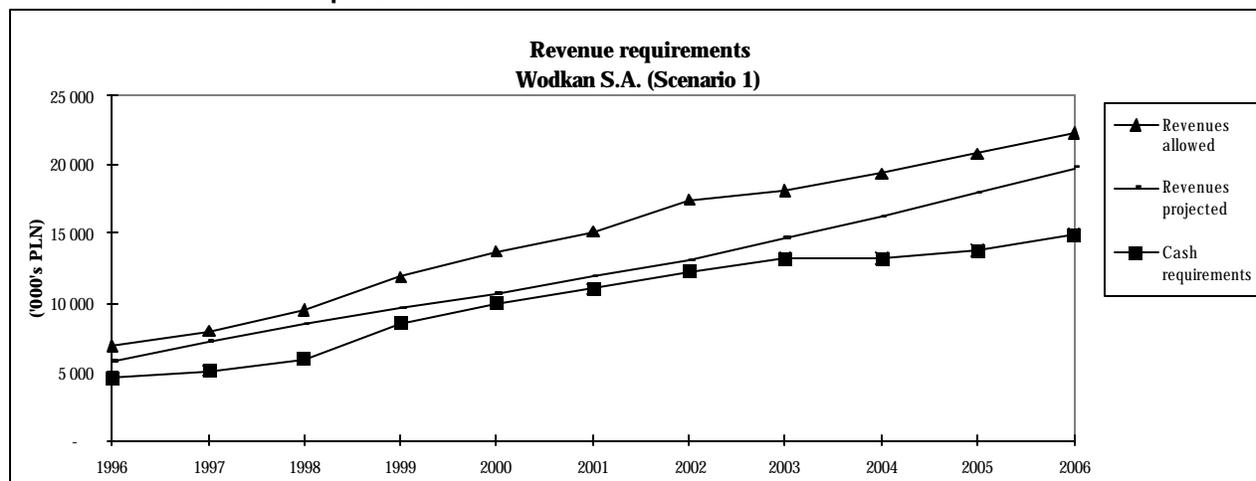
In the first scenario we determined the extent to which Wodkan could finance its own capital investments (through a combination of cash generated from operations and debt financing) assuming only inflationary price increases as shown in the following table.

Exhibit 3a: Projected Changes in Water and Sewer Prices

	1996	1997	1998	1999	2000	Projection					
						2001	2002	2003	2004	2005	2006
Inflation rate	19%	17%	15%	12%	10%	10%	8%	8%	8%	8%	8%
Percentage increase of average water price		23%	15%	12%	10%	10%	8%	8%	8%	8%	8%
Percentage increase of average sewage price		26%	15%	12%	10%	10%	8%	8%	9%	8%	9%

Exhibit 3b shows that prices would be sufficient to cover cash requirements and yet still be within legally allowable limits as shown in Exhibit 3a.

Exhibit 3b: Revenue Requirements



Wodkan had identified various sources of funding for the different projects included in its capital investments plan. It was assumed that the new wastewater pumping station could be financed by a loan from the regional environmental fund under the following terms:

- Term of the loan: 6 years
- Interest rate: 70 percent of inflation rate
- Grace period: Principal repayment to begin one year after loan origination
- Co-financing requirement: 30 percent
- Loan forgiveness: None assumed

It was assumed that extension of the sewage network would be partially financed through participation by residents who receive hook ups in exchange for capital stock of the company. The balance would be financed from the gmina budget.

Wodkan had assumed the gmina would finance the new wastewater treatment plant. It had identified a number of smaller projects it would be able to finance from its own funds.

In the first scenario, we assumed that the shortfall in funds would be made up by the gmina - the gmina would purchase additional shares of stock in Wodkan to provide funding, primarily for construction of the wastewater treatment plant. Requirements on the gmina budget are shown in Exhibit 3c.

Exhibit 3c: Requirements on Gmina Budget

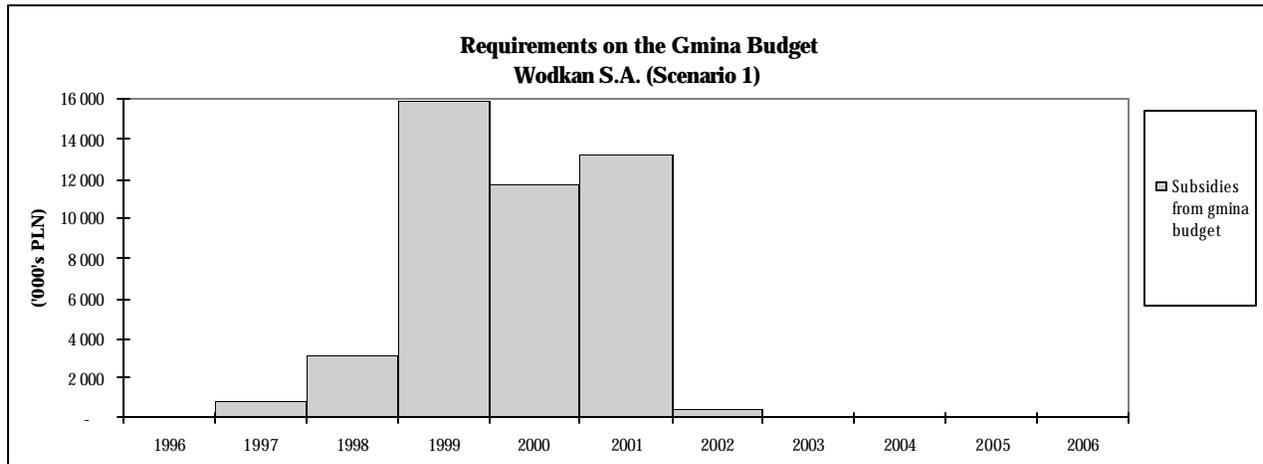


Exhibit 3d, a summary of revenues and costs, shows that Wodkan will be profitable under this scenario.

Exhibit 3d: Summary of Revenues and Costs

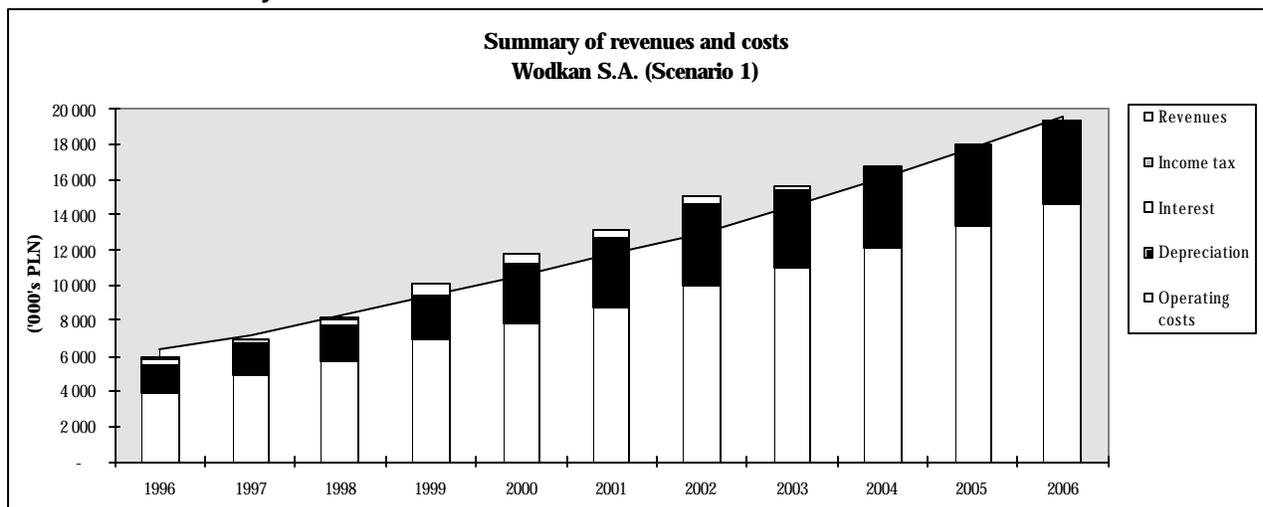
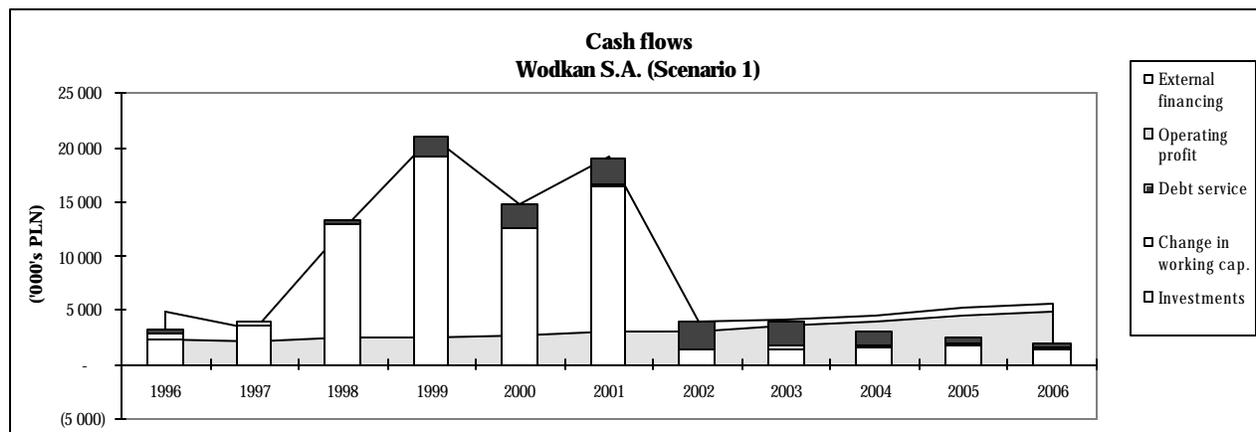


Exhibit 3e summarizes the means by which Wodkan will fund investments, debt service and increases in working capital through a combination of cash from operations and external financing, including gmina investment and some debt.

Exhibit 3e: Cash Flows



The first scenario would require gmina funding of approximately 8 to 10 times the level outlined in the gmina’s capital investment plan over the next several years (the years during which the wastewater treatment plant is to be constructed). Therefore, this scenario was judged by Wodkan management and the advisors to be unacceptable.

Second Scenario - Limited Financing of Capital Investments by Gmina with the Shortfall Made Up in Price Increases

After discussions with the gmina, it became clear that the gmina would not be in the position to finance Wodkan’s investments to the extent Wodkan had assumed. We obtained information from the gmina planners as to specific plans for financing Wodkan’s capital investments (data which was included in the gmina financial analysis model) and included this as a source of cash to determine the need for price increases.

In the second scenario, we decided to see how much prices would need to increase for Wodkan to be able to finance all capital expenditures, other than those identified in the gmina spending plans, from a combination of cash generated from operations and debt financing. Exhibit 4a shows the required price increases.

Exhibit 4a: Projected Changes in Water and Sewer Prices

	1996	1997	1998	1999	2000	Projection					
						2001	2002	2003	2004	2005	2006
Inflation rate	19%	17%	15%	12%	10%	10%	8%	8%	8%	8%	8%
Percentage increase of average water price		23%	15%	48%	43%	23%	4%	-2%	-8%	2%	2%
Percentage increase of average sewage price		26%	15%	48%	43%	23%	4%	-1%	-7%	2%	2%

Exhibit 4b shows that while these price increases are sufficient to cover cash requirements, they exceed the allowable legal limits beginning in the year 2000.

Exhibit 4b: Revenue Requirements

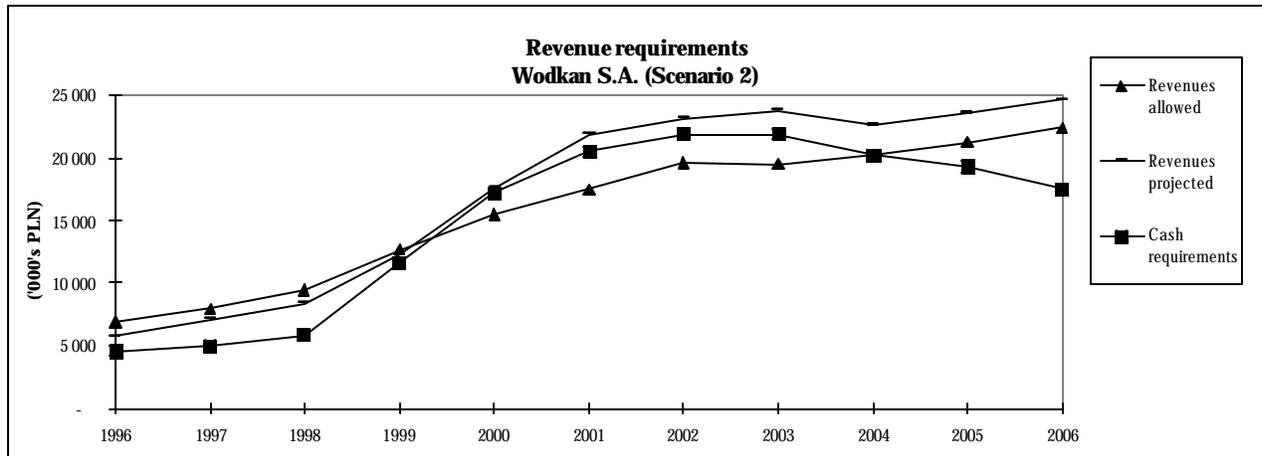


Exhibit 4c shows that Wodkan would be very profitable with these rate increases, a fact that would likely contribute to the public's displeasure over price increases.

Exhibit 4c: Summary of Revenues and Costs

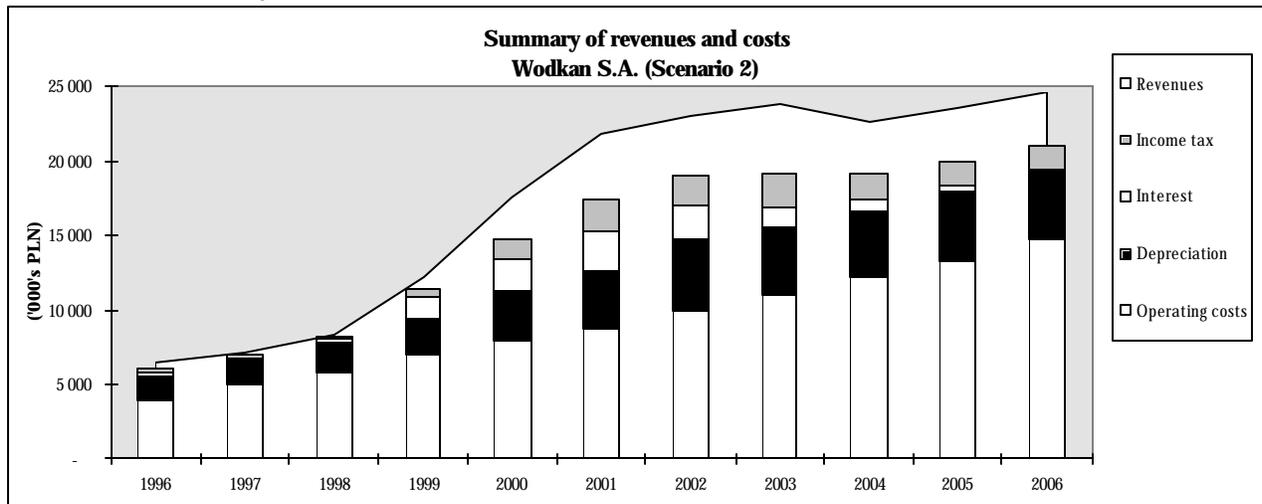


Exhibit 4d summarizes the means by which Wodkan will fund investments, debt service and increases in working capital through a combination of cash from operations and external financing, including gmina investment and some debt.

Exhibit 4d: Cash Flows

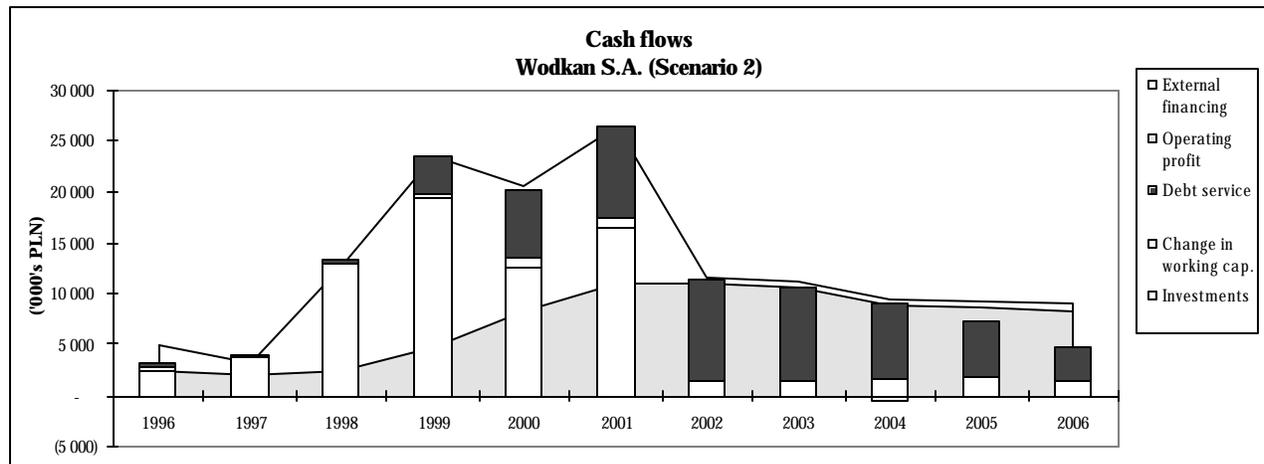
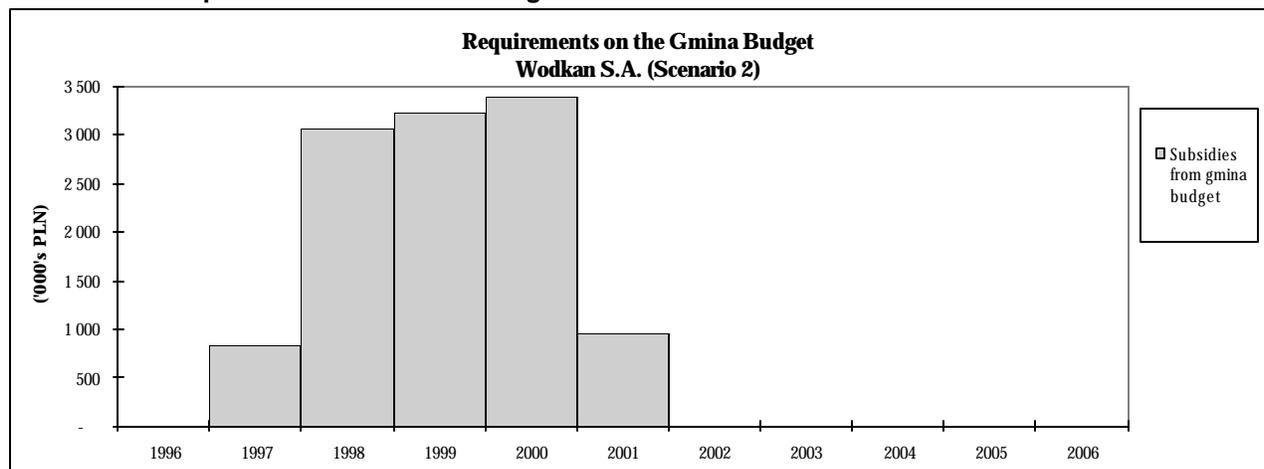


Exhibit 4e shows the requirements on the gmina budget under this scenario.

Exhibit 4e: Requirements on Gmina Budget



This second scenario was judged by Wodkan’s management and the advisors to be unacceptable. The exorbitant price increases required to provide cash for investment needs would probably not be a politically acceptable solution.

Third scenario - Longer Term Financing of Capital Investments with Less Drastic Price Increases

LGPP advisors and Wodkan management discussed alternative solutions. It became clear that, if the wastewater treatment plant is to be constructed and the gmina cannot afford to pay for it from its budget or borrow the funds, longer-term financing will be required. We discovered one case in which the National Environmental Fund provided a loan for a wastewater treatment plant with a loan term of 15 years. The loan taken by gmina, which was originated in late 1996, was guaranteed by a consortium of banks. Based on this information, we felt that Wodkan has a chance of negotiating a loan over a period longer than the six years originally projected. Wodkan management and LGPP advisors decided that a third scenario should assume a 10 year borrowing period for both phases of the wastewater treatment plant and the new central pumping station. The resulting price increases are still high over the next few years, but are much more acceptable than in the second scenario.

Exhibit 5a shows projected price increases during the next ten years.

Exhibit 5a: Projected Changes in Water and Sewer Prices

	1996	1997	1998	1999	2000	Projection		2003	2004	2005	2006
						2001	2002				
Inflation rate	19%	17%	15%	12%	10%	10%	8%	8%	8%	8%	8%
Percentage increase of average water price	0%	23%	15%	36%	15%	23%	14%	1%	0%	1%	1%
Percentage increase of average sewage price	0%	26%	15%	36%	15%	23%	15%	1%	1%	1%	2%

Exhibit 5b shows that these prices are sufficient to cover cash requirements and yet are within the legally allowable limits.

Exhibit 5b: Revenue Requirements

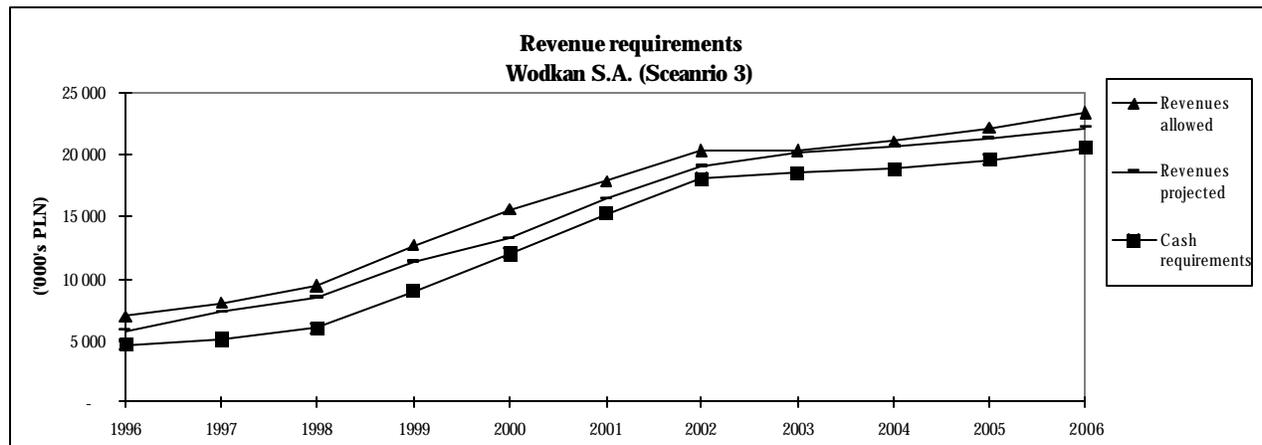


Exhibit 5c shows Wodkan's profitability picture during the projection period.

Exhibit 5c: Summary of Revenues and Costs

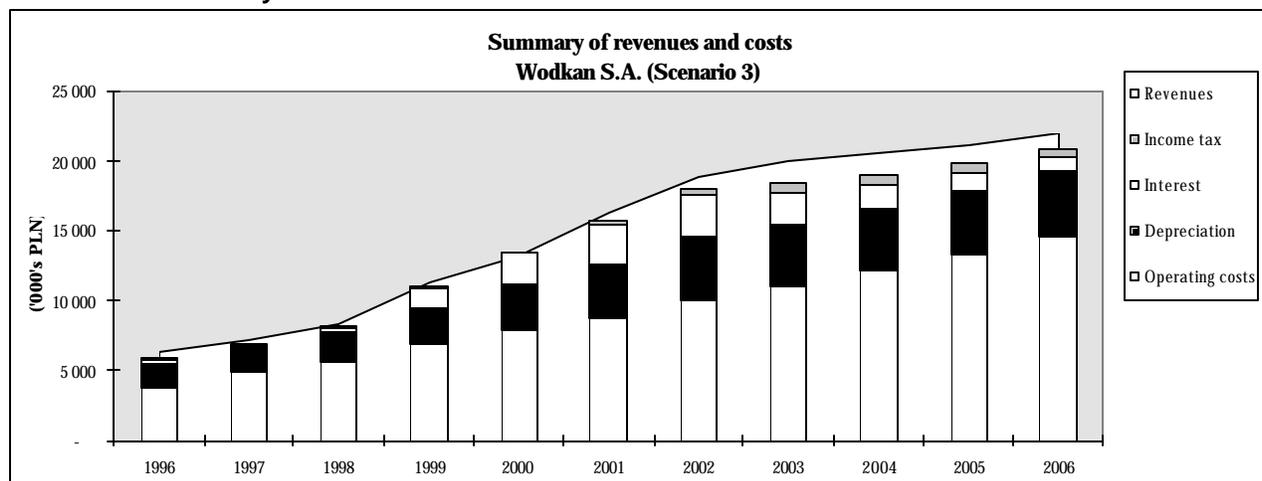


Exhibit 5d summarizes the means by which Wodkan will fund investments, debt service and increases in working capital through a combination of cash from operations and external financing, including gmina investment and some debt.

Exhibit 5d: Cash Flows

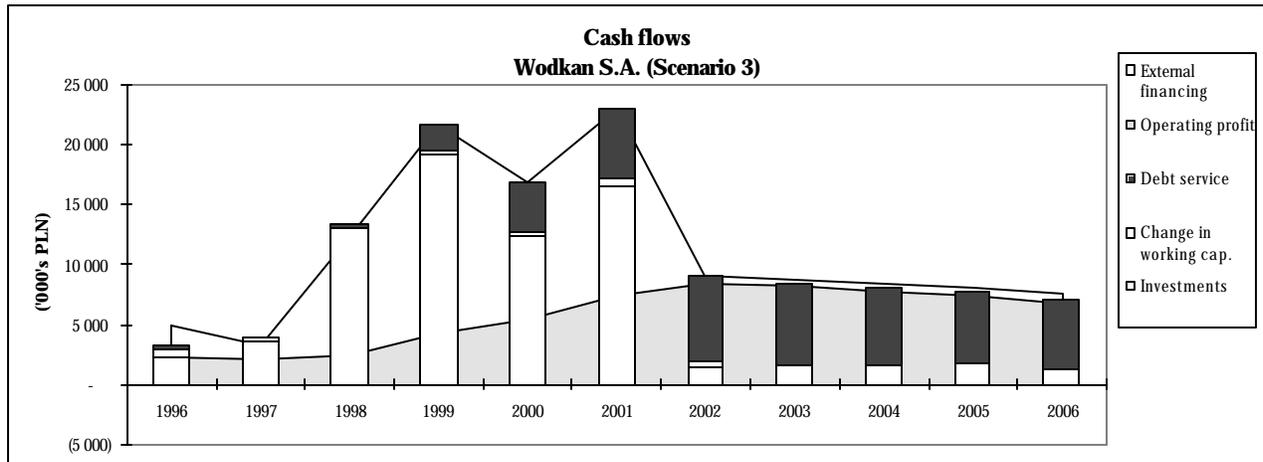
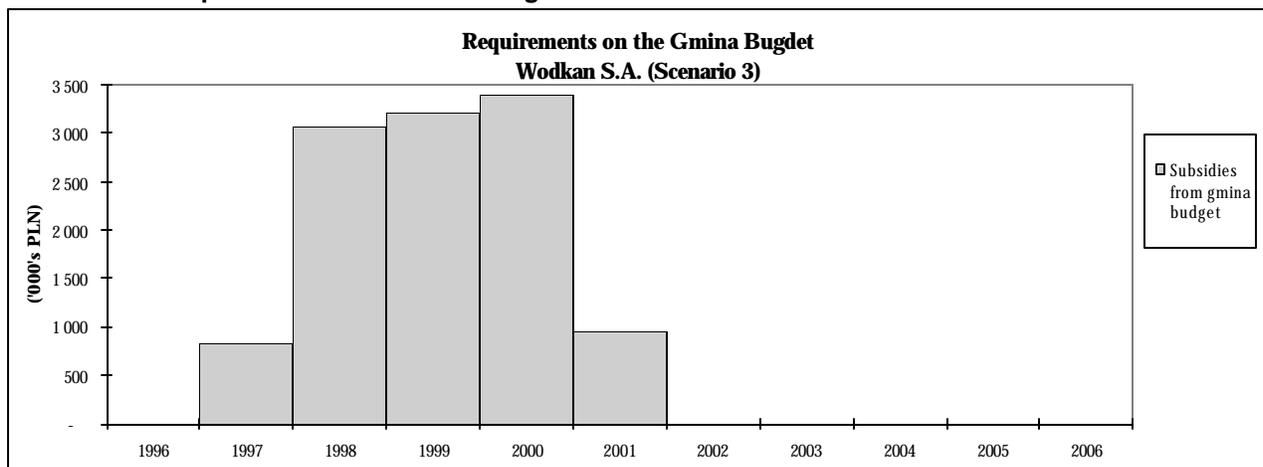


Exhibit 5e shows requirements on the gmina budget for investments.

Exhibit 5e: Requirements on Gmina Budget



There is no guarantee that Wodkan will be able to obtain financing from the National or Regional Environmental Fund under the terms and conditions assumed in this financial analysis. Pilot LGPP advisors are appealing to the environmental funds, encouraging them to grant longer term financing when a business plan is presented showing that the utility will be able to repay the loan. There is some precedent for granting longer term loans for wastewater treatment plants and we feel that Wodkan can demonstrate its ability to service the loan. However, it is likely the environmental funds will also want a guarantee from the gmina. If the gmina is not in the position to provide such a guarantee, Wodkan may be able to substitute a guarantee from HOLDICOM or a consortium of banks. In addition, the

environmental funds may accept a guarantee from the gmina that it will approve prices for Wodkan in accordance with some established methodology or at some specified rate per year (a “rate covenant”) in lieu of an outright guarantee by the gmina of the loan.

Wodkan management expressed some skepticism as to whether the company would be allowed to borrow to the extent outlined in the third scenario given its current level of fixed assets. Internationally, utilities are typically allowed to borrow using the value of the asset being financed as well as other utility assets as collateral. We believe the Polish market is quickly adopting international standards, but at the present time some additional guarantee may be required (HOLDICOM or the gmina).

Additional Assistance Being Provided Under the Pilot LGPP

We have recommended that the construction plans for the new wastewater treatment plant be reviewed by an engineer to determine the appropriateness of sizing and timing of phases. There is no question that a new wastewater treatment plant is needed to serve existing customers and that it needs to be constructed as soon as possible. However, we were unable to obtain information supporting the sizing and phasing of the planned phases of the plant. Wodkan management is now providing information to Marek Zabost, a technical advisor from our team, who will report on the situation.