

EMASESA: the present of a company with a future

MANUEL JESÚS MARCHENA GÓMEZ, Managing Director of EMASESA, the water utility of Spanish city Seville, shares his vision of the activities that underpin his organisation's success.

EMASESA (Empresa Metropolitana de Abastecimiento y Saneamiento de Aguas de Sevilla, S.A.), based in Andalusia (Spain), has over 30 years' experience in the management of the integrated urban water cycle, supplying over a million people and covering areas with significant industrial activity.

EMASESA currently supplies high-quality potable water to more than half the people of the province of Seville and over 10% of the population of Andalusia. We are one of the few Spanish companies that directly manage all of the processes of the integrated urban water cycle. EMASESA has an extensive infrastructure, including four reservoirs, three hydroelectric plants, one potable water treatment plant, 35 pumping stations, 28 storage facilities, five wastewater treatment plants (WWTPs) that treat 100% of the wastewater of the metropolitan area of Seville and which also manage the sludge from the treatment process by drying it in hothouses and composting for subsequent use in agriculture, 24 wastewater and 37 rainwater pumping stations, and two storm tanks. With a sanitation network totalling 3600 kilometres, we never lose sight of environmental sustainability.

We are one of the few Spanish companies that directly manage all of the processes of the integrated urban water cycle. In order to deliver the best possible water quality and to minimise the impact of discharges, EMASESA has five laboratories accredited by ENAC (the Spanish national accreditation body) and six ISO 9001-certified laboratories. We are the company with the highest percentage of electronic meters and the only one with 100% electronic reading. Since its very beginnings, EMASESA has stood out for its innovative spirit and its firm, long-term backing for the application of ground-breaking technical and technological solutions.

Our revenue in 2009 came to €108 million (\$132 million), with investment up by €48 million (\$59 million) as a result of increased work on sanitation networks and facilities and investment in the new Ranilla WWTP,

which cost €35.5 million (\$43.5 million), as well as investment in intellectual capital, new knowledge, and research, development and innovation (R&D&I) projects.

Offering a better service to our most important asset, our customers

EMASESA has customer service points in all of the areas served – seven offices and 23 public service points – as well as customer service via all possible communication channels, including a 24/7 telephone service and a website, which is one of the most highly-regarded in the sector in Spain (www.aguasdesevilla.com). It is a participatory website with technological tools such as forums, surveys, etc., which makes us an 'organisation 2.0', barrier-free, where information flows in both directions between the company and its customers. Our customers express a level of satisfaction of 8.7 out of 10 for our personal service, and the trend is clearly upwards.

Excellence and positioning

Our objective is excellence in the service we provide – a quality service with maximum customer satisfaction. EMASESA has a specific policy for its relationships with each interest group with which it engages and is a pioneer in the active participation of society in its management bodies, to which end it has brought representatives of the public into the company's decision-making



organs. Notable joint actions that have been undertaken include the implementation this year of a new invoicing model at EMASESA, unique in the sector, based on the application of varying charging bands, which correspond to the number of inhabitants in each dwelling, applying criteria of sustainability and greater fairness. I believe that these facts confirm our position in a market where we are opening up the path for others to follow.

On the demand side, the use of water-saving devices has been promoted and we have run awareness-raising and public participation campaigns. Programmes aimed at reaching out to the business sector are fundamental for this, as are regulations, the appropriate metering equipment (electronic meters), audits and the re-use of treated and domestic water.

In recent months, EMASESA has attended the Water Utility Conference – Strategic Opportunities for Future Challenges, organised by the Agbar Foundation and the International Water Association (IWA). At this edition of the conference, we worked closely with international, cutting-edge companies active in our sector, sharing experiences and projects. It is not for no reason that EMASESA has consolidated itself as the leading water utility in Andalusia and the second largest publicly-owned company in Spain, guaranteeing a high-quality public service in the management of the integrated urban water cycle for all users, without distinction.

Likewise, I should like to underline the quality and dedication of the personnel of the company. Between all of us, we have managed to build up and maintain a water utility which is 100% publicly-owned, which devotes its investment to the quest for excellence in the service of society and its customers, which has a real



commitment to the environment with outstanding environmental programmes. A company which, despite the trend towards privatisation seen in the sector, is still one of Spain's leading companies, as can be seen from its second place in the corporate reputation ranking drawn up by MERCO for the Entorno Foundation Award in the 'Communication for Sustainability' category, and from it having been selected as a finalist in the European Business Awards from among 3500 companies from different countries.

Resources

I should like to underline that the water supply comes from four reservoirs (Aracena, Zufre, Minilla and Gergal) located on the Rivera de Huelva, an affluent on the right bank of the River Guadalquivir, and a fifth reservoir (Cala), which is on the Rivera de Cala and is, in turn, an affluent of the Rivera de Huelva, into which it flows upstream of the Gergal reservoir. The total storage capacity of the first four is 395 cubic hectometres and that of Cala, 58.8 cubic hectometres. The latter is used for the generation of electricity and its water is then used for supply.

Fortunately, the water from the reservoirs is of very good quality with very low mineralisation, as we are located in a very stable geological area, which also has a very sparse population and little agriculture or livestock farming. In all events, the Carambolo water purification plant is able to solve any problems which might arise.

We must not though forget the main problem affecting this region, which are the periodic droughts we suffer as a result of our geographical location, but which we hope to palliate with the water-saving and efficiency measures that we have implemented since the last period of drought (1992-95). These measures have allowed us to reduce considerably the amount of water transported and distributed. We now also have the new Melonares reservoir, which helps to guarantee supplies.

Innovation and energy

At EMASESA, we are aware of changing market forces and how market activities provide wellbeing to the public. Consequently, we consider technological R&D&I key for our organisation to be able to perform its functions competitively and with maximum efficiency. I can confidently state that we at EMASESA, through efficient management and R&D&I projects, have opted to be different, offering the market innovative products and services as part of our ongoing quest for excellence.

Here, we should highlight the Aqua R&D&I project, a set of information systems whose purpose is to bring innovative management methods to water utility companies, or the Supercritical Oxidation project, which uses supercritical oxidation to eliminate sludge at WWTPs. This treatment has a very specific final purpose, achieving significant environmental advantages, since it is a complete solution to the problem of the elimination of waste from WWTPs.

We firmly believe that our company possesses the spirit, the organisational structure and the resources necessary, together with experience and knowledge, to meet all of the challenges and

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contingencies facing a sector which is currently undergoing profound changes. This is why EMASESA looks to continuous innovation and diversification as a business strategy.

The main objectives of EMASESA's strategic plan are the development of new business and the opening up of new markets, such as renewable energy. In this strategic plan, one of our main objectives is the development of new business and opening up new markets and revenue sources, such as renewable energies, through photovoltaic solar energy (1000 kW solar photovoltaic plant at the Copero WWTP) and photovoltaic installations at storage facilities and on buildings (1500 kW). We should also mention the cogeneration of biogas (four WWTPs: 3200 kW) and mini-hydroelectric plants at the reservoirs: Aracena (4570 kW), Zufre (4537 kW) and Minilla (2170 kW).

EMASESA's energy situation is very interesting. With a single director and highly-qualified upper management and personnel, we are ready to take the leap forward towards energy self-sufficiency. We have improved, above all, the supply and demand sides. On the supply side, we have worked on operations and maintenance practices within the system, the reduction of losses and leaks, the redesign of the system, and operations in WWTPs, and we have included water and energy efficiency as a criterion in the selection of projects.

Today, we also offer a broad catalogue of products, including: consultancy in wastewater management, design and installation of infrastructure, integrated management systems specific to water supply and

sanitation companies (AQUAWS), mobility incident systems (GIM), communications networks, including both fibre-optics (HISPALNET) and digital radio-telecommunications (SECORA), as well as a wide range of products too numerous to mention. As regards innovation, I should finally like to highlight DeSevilla, a flavoured, bottled water from our own supply network in an exclusively-designed, high-quality glass bottle. It confirms the excellent quality of the water supplied on our public distribution network and makes us the first Spanish water utility to launch a project of this kind.

Objectives for the future

At this point, I should like to draw attention to EMASESA's objectives for the next decade and I should like to reiterate that our vision is to be a publicly-owned beacon company that respects certain basic principles based on the excellence of the service provided (we have eight offices and 16 customer service points, as well as a 24/7 telephone line), meeting the current and future needs of our customers and shareholders and promoting research, development and innovation. And all of this, in the public service.

I should like to emphasise our efficiency in resource management, a field in which we always act in accordance with criteria of sustainability. We guarantee the supply of water of the required quality, we keep our supply reservoirs in good ecological condition, we take advantage of positive environmental externalities, we reduce the environmental impact of our operations and, finally, we discharge our water into the receiving environment under conditions that cause no impact.

Cooperation and coordination with other public services, administrations, institutions and organisations of the metropolitan area of Seville also form an important part of our horizon, without forgetting the profitable exploitation of our technical resources and assets through new lines of activity and the expansion of EMASESA Metropolitana. ●

Manuel Jesús Marchena Gómez presented at the IWA Water Utility Conference – Strategic Opportunities for Future Challenges 2010, held 10-12 May 2010 in Barcelona, Spain.

About the author:

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