

EXTENDING SUPPORT FOR SMALL DESAL COMPANIES - WHILE MAINTAINING THE CREDIT AND RESPECT FOR

BIG ONES...

In his first-ever interview with EverythingAboutWater after taking over as IDA President, Dr. Emilio Gabbrielli speaks to us on his presidential agenda for the next two years and the industry's priorities going forward. In September last year, he was elected as the new president of International Desalination Association (IDA). He has 40 years of experience in water. His first exposure to desalination was in 1975, while in Peru, he became involved in design and construction of a solar desalination plant to produce drinking water for a marginal community in desert region of north. This experience was enough to convince him to pursue a career in water resources development and protection, making desalination his technical focus. His first projects included desalination plants in Libya, Algeria and Saudi Arabia based on EDR and on MSF technology associated with power generation. He has played a key role in design and construction of most of the desalination and reuse projects in Australia. Excerpts...

Q What most excited you about the opportunity to lead the IDA? What convinced you to seek the position?

As I have often stated, in recent years desalination and reuse have become mainstream fresh water supplies and will increasingly play a role in ensuring social, economic and environmental balance. This is what makes me excited about leading the IDA as President. www.idadesal.org

But the effective and beneficial application of such technologies is not straightforward and this can only happen when all involved (rather than the over-used term stakeholders) are able to make informed decisions, in all the region of the world. The IDA, as the association of the worldwide desalination and reuse community, both present and potential, has the clear responsibility to help with this. To try to respond to this challenge is what convinced me to seek the position.

Q In your remarks after being declared as IDA President, you said “my

vision is a better world through water security - desalination and water reuse have an important role to play in this.” Would you like to elaborate on this?

My answer to your first question leads me directly into elaborating about this. Everybody knows that in the end, the poor are those who pay by far more than the rich about water, whether it is in the manpower that the mainly female population of the world has to dedicate to fetch water for the family, or the dwellers of the slums of the world who have to pay extortionist prices for a few liters of water of dubious quality from the water barons. At the same time, when I was at the Global Water Partnership, I found the apparently paradoxical slogan that the poor cannot afford cheap water a useful way to make people think.

Well, when all the real costs associated to the reliable supply of fresh water of suitable quality to all are taken into consideration, one can come quickly to the conclusion that suitably planned and managed desalination and reuse are in many cases the best option, also for the poor.

Q Could you also identify the areas in desalination that are ripe for innovation?

Let me start by clarifying one thing: The name of our association, IDA, is an acronym that was chosen for its simplicity but does not include the initials of the full name. The full name of IDA is the International Desalination and Water Reuse Association. This has led to the understanding that “in house,” when we say desalination, we also mean reuse. Obviously, this is not clear at all to those who are not intimately aware of IDA.

I make this clarification now because in my mind, the area that is more “ripe” for innovation is reuse, rather than desalination as such.

In fact, most people in our industry think that it is unlikely that in the short/medium term there will be a breakthrough of new desalination technology that may become more efficient than reverse osmosis in providing large quantities of desalted water. That said, our industry has made significant

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strides in advancing more energy efficient and environmentally responsible desalination technologies and practices. The use of renewable energy to power desalination plants is no longer just a dream - it is becoming a reality.

In the big picture, I believe that the area of reuse is ripe for a broader approach, for innovation in how the existing variety of technologies can be assembled together to provide solutions to the need of water, targeting the achievement of the quality of water required in any specific case at the minimum cost. This has to go hand-in-hand with innovation in social approach and understanding, like direct potable reuse of treated effluent from wastewater, whose acceptance by society worldwide is increasing.

Q What will IDA be doing to help foster and cultivate newer technologies in desalination?

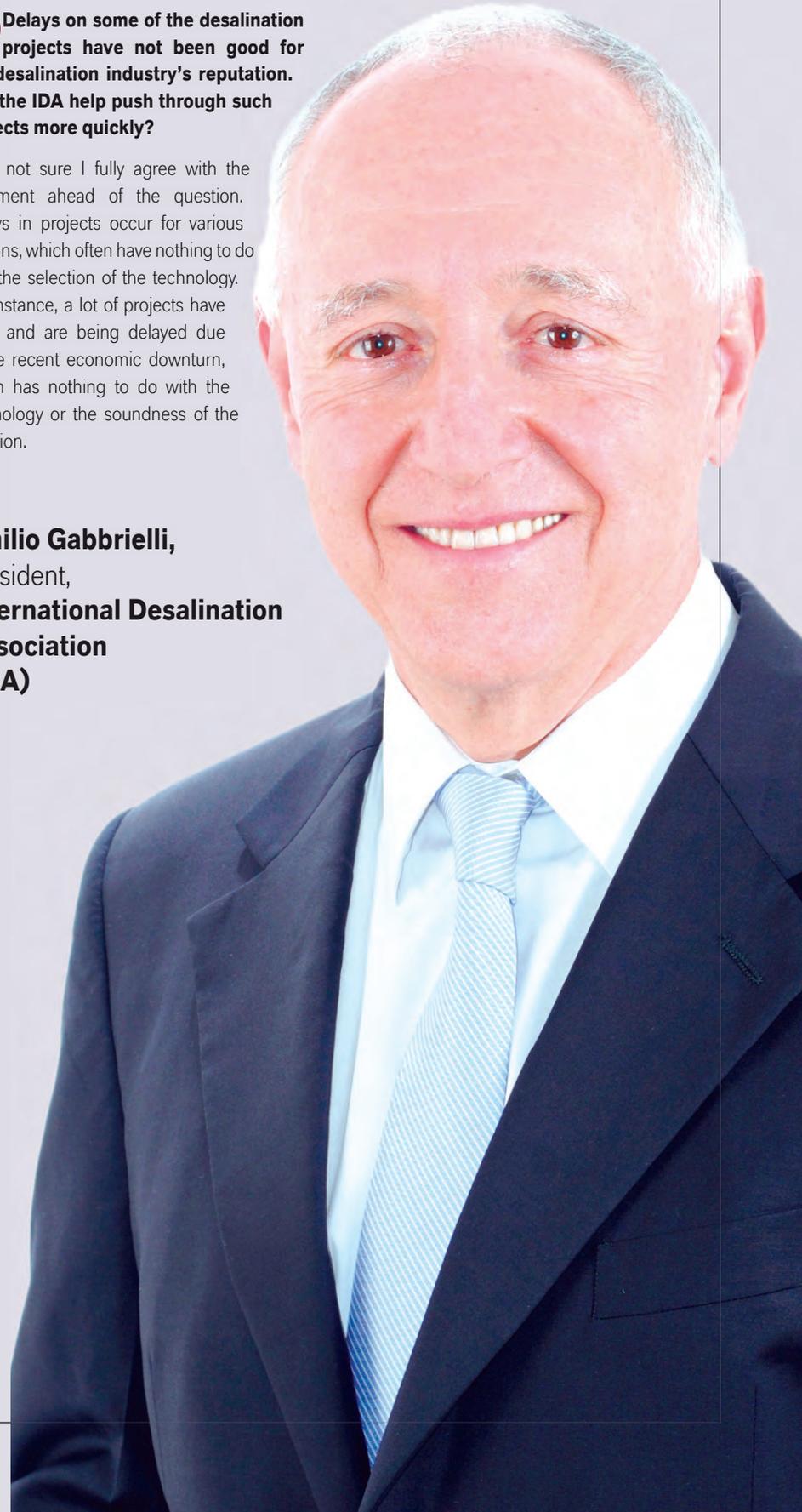
IDA will keep doing what has always done well, I believe, by striving to continually improve by listening to its members. IDA is the point of connection for the global desalination and water reuse community. We play an important role in facilitating the exchange of knowledge, be it through publications, conferences, educational programs, debates, etc. In doing so, IDA has to be very attentive to the new ways of communication that are becoming available and that members expect to use to share information.

IDA will also have to be very committed to promoting a stronger debate and analysis in many countries and situations on how to decide the use of the right balance of desalination and reuse while looking at mechanisms of reduction and optimization of water consumption. In the past, the easy solution has often been just to think of desalination as a straight answer to a perceived demand. In fact, desalination is part of a broader solution that includes also includes conservation, appropriate treatment and utilization of traditional water resources, and water recycling and reuse.

Q Delays on some of the desalination projects have not been good for the desalination industry's reputation. Can the IDA help push through such projects more quickly?

I am not sure I fully agree with the statement ahead of the question. Delays in projects occur for various reasons, which often have nothing to do with the selection of the technology. For instance, a lot of projects have been and are being delayed due to the recent economic downturn, which has nothing to do with the technology or the soundness of the decision.

**Emilio Gabbrielli,
President,
International Desalination
Association
(IDA)**



Water is essential to life and society, and it is not surprising that it has strong political connotations. Often potentially good projects of desalination and/or reuse have been and are being decided without the necessary buy-in by all sectors. As a result, delays are to be expected and in some cases, useful for a more successful outcome of the project. I see the role of IDA not so much that of pushing such projects ahead more quickly, but providing information and a neutral, informed ground of debate where consensus to proceed can be more readily and effectively achieved.

Q Overall, how do you see the desalination sector's future and IDA's role in it?

I think responsible and informed desalination and reuse are quickly becoming part of standard balanced water supply to society, industry, agriculture and environment. When my children get to my age, I am sure a large number of cities in the world will have reuse as standard part of their water supplies, and industry overall will, in general, reuse many times the water needed in their processes. Also agriculture will use desalted and reused water more and more, especially for higher value products and hydroponic production in intensely inhabited realities.

Growth in the role of desalination and reuse will also increase the role of IDA as the connecting point and hub of information, where experiences in increasingly varied applications will be shared so as to optimize plant operations and decision-making, and where all those involved in the industry will be able to access reliable and objective data and information.

Q The smaller haulers sometimes feel the big companies get much of the association's attention. What do you see IDA offering the smaller companies?

Let me confess that this is your hardest question so far, because I see it myself as a problem (after all my own company Toray is one of the big ones), and it is an issue that concerns me. Unfortunately, I still do not have a very clear answer to it in my mind. I

consider this as one of the key challenges that I accepted in running for the Presidency.

IDA will need to find ways to make sure that the smaller players feel that they have a choice and an opportunity to be heard, similar to my fight for having the less "heard" regions of the world to be heard as much as the "louder" ones. I think one of the paths is to be more effective in promoting and supporting more local events - mainly through our affiliates and also directly when necessary - where smaller local players may have a better chance to make their influence and voice heard.

With regards to smaller global players, from my perspective, I see quite a few of them pushing their way through by the force of enthusiasm and the lack of acceptance of the status quo. This is very healthy, and indeed, I will give them the necessary support while at the same time maintaining the credit and respect that the big companies deserve, because after all without their support IDA would not exist.

Q What are your personal expectations from the 2017 IDA World Congress, Brazil?

When I joined the Board of IDA six years ago, I was dismayed to find out that there were only six members in Latin America, where there was already significant experience in desalination and reuse, starting with the Brazilian oil company Petrobras and including mining companies and municipalities in Chile, etc. The lack of IDA membership indicated to me that the local desalination and reuse community was totally isolated from the global one, with a loss for both sides: the world hardly knew of the experiences of South America, and many potentially useful applications in Latin America were hindered by the lack of local knowledge. I do hope that the 2017 IDA World Congress in São Paulo - IDA's first World Congress in Latin America - will help fill this vacuum and establish fruitful links, while catalyzing the going forward of potential projects that may be useful for the region.

Since the first time I started promoting a Congress in Brazil five years ago, the interest in

our technologies has increased also because of the worsening of the drought conditions in Brazil, and São Paulo in particular, where the Congress will be held. It is important to have a place where important discussions can occur about the fact that desalination and reuse must no longer become "sexy" just as a response to emergency. That is not their most important role: their key role is to be considered as potential water supplies in the routine planning of authorities and industry.

I will be very happy if, following the São Paulo Congress, there will be many more enthusiastic IDA members with the discourse and awareness of desalination and reuse in the region reaching a new level.

Q Finally, what is your take home message to desalination professionals in India?

My take home message to desalination professionals in India is that I believe that they have chosen an exciting path, crucial for the well-being of society. I wish them all the persistence and commitment needed to make this work for them as realized professionals and for India's social and economic growth, never taking anything for granted or losing faith in spite of momentary difficulties that may appear insurmountable, but more often than not, are conquerable.

Let me conclude by sharing with you that, as a young Chemical Engineer working in the desert of Northern Peru in 1974, I came across water issues and desalination by chance. Some students and teachers got me involved in a solar desalination to help a marginal, desperate community with brackish water and raw sewerage as its only source of fresh water. There I learned about the importance of water and the potential of desalination, so that I decided to make of this field my career. Forty-two years later, I am very happy with the choice I made based on the teaching of those pioneers, both technically and socially. I am sure young professionals in India have plenty of opportunities to follow a similar path...and please be active in the IDA and make your word heard!