

Expanding the Mediterranean Energy Sector:

Fuelling Regional Growth

OFFSHORE MEDITERRANEAN CONFERENCE & EXHIBITION

POST SHOW REPORT

Organised by







The Figures of an Outstanding Success

THE LARGEST **MEDITERRANEAN MEETING POINT FOR THE OIL&GAS AND ENERGY INDUSTRY**

23,400 PARTICIPANTS



600 EXHIBITORS



30,000 SQMS AREA



37NATIONS



200PRESENTATIONS



The Figures of an Outstanding Success



Official delegations came from:
Egypt, Libya, Kazakhstan,
Angola, Azerbaijan, Indonesia,
Cyprus, Greece, Lebanon,
Malaysia, Oman, Qatar,
Russia, Saudi Arabia,
Thailand, United Arab
Emirates, to name
a few.



The Inauguration Ceremony

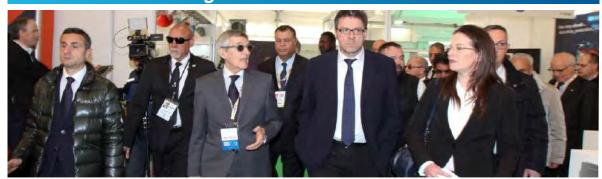




The Inauguration

OMC 27-29 \(\frac{2}{2019} \) March 2019 \(\frac{2}{2019} \) RAVENNA \(\frac{2}{2019} \)

Giancarlo Giorgetti, Undersecretary of State visiting the exhibition after inauguration

















The Conference



Welcome Addresses: Innocenzo Titone, Chairman OMC 2019 Michele De Pascale, Mayor of Ravenna

10.15 - Giancarlo Giorgetti, Undersecretary of State to the Prime Minister, Italy

10.30 - 12.30 OPENING PLENARY SESSION:

EXPANDING THE MEDITERRANEAN ENERGY SECTOR: FUELLING REGIONAL GROWTH

Setting the scene: **Simon Flowers**, Chief Executive Officer Wood MacKenzie

Global and Regional outlook: trends, perspectives and challenges of the Energy Sector

Pratima Rangarajan, Chief Executive Officer Oil and Gas Climate Initiative Accelerating technology innovation towards carbon neutrality

Ali Abdulaziz Alissauia, Minister of Economy, Libya Abed Ezz El Regal Ministry of Petroleum and Natural Resources Egypt Luigi Ciarrocchi, Executive VP for Italian Region ENI Marc Benayoun, Chief Executive Officer EDISON Stefano Cao, Chief Executive Officer SAIPEM

Moderator: John Follain, Bloomberg

The Official Opening

OMC 27-29 \(\text{2019 March 2019 ENNA ENNA ENNA EN A CONTROL EN A CO

Giancarlo Giorgetti, *Undersecretary of State to the Presidency of the Council of Ministers*The search for a growing energy indipendence combined with environmental protection and the implementation of innovative technologies are central issues of the government programme. Italy is fully entitled to create a gas hub for Southern Europe



Pratima Rangarajan

CEO Oil and Gas Climate Initiative
In order to meet the growth by 30% of energy demand in the

next 20 years and reduce emissions by 50% the major oil

companies are committed to develop new technologies and

extensively use more efficient processes.



Mediterranean countries have the capacity to increase their gross domestic product in the next 20 years as a result of the gas discoveries and the renewables they are rich of, so Europe can meet the energy transition challenge also by diversifying energy supply.





The Plenary Session



Marc Benayoun, CEO EDISON Luigi Ciarrocchi, Executive Vice President for Italian Region ENI Abed Ezz El Regal, CEO Egyptian General Petroleum Corporation (EGPC) Stefano Cao, CEO SAIPEM John Follain of Bloomberg moderated the debate. EXPANDING THE MEDITERRANEAN ENERGY SECTOR: FUELLING REGIONAL GROWTH

The Plenary Session

OMC 27-29 \(\) 2019 March 2019 \(\) 2019 RAVENNA



Ezz El Regal- CEO EGPC
Egypt's gas hub is a reality and the country will soon become an LNG exporter. Egypt stands as an example for other countries in the region to work together. Strategically important are the results of the East Med Gas Forum held last January in Cairo, which can promote common projects to create gas transportation infrastructures and achieve a regional gas market.



Luigi Ciarrocchi - Executive Vice
President for Italian Region ENI The
industry is ready to meet a dual
challenge: growth and
sustainability. Ravenna district is
an example of sustainable
development. Offshore gas
exploitation has produced wealth
and jobs preserving the region's
peculiarities such as agricolture,
tourism and culture. Eni's
commitment continues from CO2
capture and reuse to waste to fuel
and circular economy.



Stefano Cao - CEO SAIPEM After dropping in the most recent years investments will gradually grow again. However staying competitive is mandatory. Saipem's approach to the project relies on a tight cooperation amongst stakeholders. Zohr is an example as new cooperation models permitted to achieve a record time to market. The technological asset and the managerial capabilities achieved by Saipem play a role also in the field of renewables.



John Follain -Bloomberg



Marc Benayoun - CEO EDISON
Gas has a brilliant future so new import routes for LNG must be considered. An example: the LNG plant under construction in Ravenna to supply land and maritime transportation.



WEDNESDAY 27 TH MARCH - 16.00 - 18.00, ROOM A

DEVELOPMENT OF THE MED GAS HUB: THE ROUTES TO EUROPE

Speakers:

Maurizio Coratella, Chief Operating Officer Onshore E&C Division, Saipem

Pierre Vergerio, Executive Vice President, Gas Midstream, Energy Management & Optimization Div., Edison

Moderator: Massimo Nicolazzi - Professor, Economics of Energy Sources, Turin University

THURSDAY 28TH MARCH - 11.00 - 12.45, ROOM A

EAST MED GAS POTENTIAL: ADDITIONAL RESERVERS TO BE FOUND AND EXPLOITED?

Speakers:

Efthymiou, Geoscience Lead, Cyprus Hydrocarbon Company (CHC), Cyprus **Yannis Bassias**, President & CEO, Hellenic Hydrocarbons Resources Management (HHRM), Greece **Luca Bertelli,** Chief Exploration Officer, Eni, Italy

Moderator: Manfred Hafner, Professor, International Energy Studies, John Hopkins University (SAIS Europe) and Director Research on Energy Policy, Fondazione Eni Enrico Mattei (FEEM)

The Conference - Panel Sessions

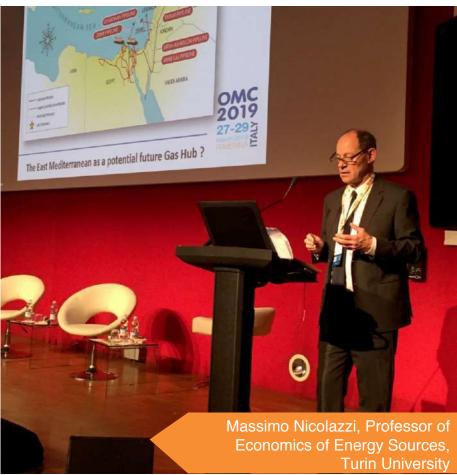
OMC 27-29 \(\text{2019 March 2019 E} \)

The creation of a gas hub through the development of integrated projects, the gas transportation and commercialization were at the centre of the first day panel "Development of the Med Gas Hub: the Routes to Europe".

Massimo Nicolazzi, Professor of Economics of Energy Sources at Turin University, introduced the topic presenting development projects connected to recent discoveries. He raised points such as regional cooperation, different ways to transport gas and related economics.

Will Europe be the market or just one market when domestic demand is satisfied?





Maurizio Coratella, COO Onshore E&C Division Saipem and Pierre Vergerio, Executive V. P. Gas Midstream, Energy Management & Optimization Division Edison partecipated in the discussion.

The Conference - Panel Sessions

OMC 27-29 \(\text{2019 March 2019 E} \)



On the second day the panel "East Med Gas Potential: Additional Reserves to be Found and Exploited?"

debated the additional potential in geological areas that can be discovered also thanks to technologies, such as super calculators that today can reach 22 Petaflop (22 million billion operations per second).

Manfred Hafner, Professor at the John Hopkins University and Director at FEEM, fuelled the discussion starting from the analysis of the discoveries and highlighting the need of a multilateral approach which would stimulate the growth of an integrated regional gas market.

Luca Bertelli, Chief
Exploration Officer, Eni,
Efthymios Efthymiou,
Geoscience Lead, Cyprus
Hydrocarbons Company, and
Yannis Bassias, President
and Ceo, Hellenic
Hydrocarbons Resources
Management, reported on
their country's programs.









FRIDAY 29 TH MARCH - 11.00 - 12.45, ROOM A

THE DEVELOPMENT OF ADVANCED TECHNOLOGIES: NEW BUSINESS OPPORTUNITIES IN THE MEDITERRANEAN

Setting the scene:

- Technological roadmap supporting blue growth and offshore operations Fabio Fava, Full Professor of Industrial & Environmental Biotechnology, University of Bologna
- Technological roadmap supporting national and regional blue growth and offshore operations **Giovanni Caprino**, Technology Cluster Blue Italian Growth

PANEL DISCUSSION

Speakers

- Yannis Bassias, President & CEO, Hellenic Hydrocarbons Resources Management
- Demetris Fessas, Executiv e Director, Cyprus Hydrocarbons Company
- Sergio Polito, Vice President Equipment and Services Sector, Italian Petroleum and Mining Industry Association (ASSOMINERARIA)

Moderator: Davide Tabarelli, President, Nomisma Energia

Conclusions by the Italian Undersecretary of the Italian Minister for Economic Development, Davide Crippa

The Conference - Panel Sessions



The third panel "The Development of Advanced Technologies, New Business Opportunities in the Mediterranean", focused on the new business opportunities to revitalize the offshore industries through advanced technologies derived from different sectors, such as the reuse of platforms, renewables from the sea, aquaculture and the use of submarine robots.

Two contributions on the technological roadmaps supporting offshore operations in terms of "blue growth" set the frame for the discussion: **Fabio Fava**, Professor of Industrial & Environmental Biotechnology at Bologna University, and **Giovanni Caprino**, Technology Cluster Blue Italian Growth.

Davide Tabarelli.

President Nomisma Energia led the discussion among **Yannis Bassias**, President and CEO Hellenic Hydrocarbons Resources Management, **Demetris Fessas**, Executive Director of Cyprus Hydrocarbons Company and **Sergio Polito**, Vice President Assomineraria.



Davide Crippa, Undersecretary of the Italian Minister for Economic Development stated that the Italian Government is fully committed to energy transition and its main target is the implementation of processes to speed up energy transition and sustainability. He acknowledged that the O&G industry has the expertise and the technological knowhow and capabilities which are needed to boost renewables.



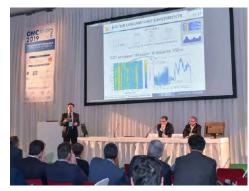
The Conference - Technical Sessions

OMC 27-29 \(\text{2019 March 2019 ENNA E } \)

The conference addressed all the themes of the O&G supply chain and energy sector:

27 technical sessions with 112 papers, 10 digital poster sessions with 48 papers presented during the 3 days of debates.

Under the guidance and leadership of the OMC 2019 Chairman of the Technical Committee, Roberto Cimino, besides conventional oil&gas topics, papers covered technologies for energy transition, energy efficiency, digitalization and artificial intelligence, thus proving how consistently committed the industry is to new energy sources and sustainable development, which is to say to a more "green" use of energy.





The quality standard of the presented papers was appreciated by all delegates. As an additional confirmation of their high International rating, papers are published at **onepetro.org**, SPE's International technical e-library.

1	Opening Session
3	Panel Discussions
27	Technical Sessions
48	Poster Sessions
4	Workshops
11	Tech Talks Presentations
450	B2B meetings



Workshops, Tech Talks and B2B

During the 3 days of the event different initiatives were carried out by associations and companies presenting their researches and findings as well as their current and future projects with workshops and "tech talks" sessions.

- The DGS-UNMIG of the Ministry of Economic Development presented on the third day, the results of the Clypea Innovation Network for Future Energy, an innovative hub promoted by the DGS-UNMIG, to share skills and experiences amongst institutions and companies engaged with the challenges of the energy transition scenario. The workshop was opened by the Undersecretary of the Minister of the Economic Development Davide Crippa
- Internationalization & Capacity Building for a Sustainable Business Environment in Oil & Gas producing Countries (second day) attended by the Vice Minister Ministry of Economy and Finance Laura Castelli, Riding the Digital Transformation and the Environmental Transition: the key features of the Italian Oil & Gas value-chain (third day) and Meeting with the Kazakh delegation, both organised by Assomineraria Italian Petroleum and Mining Industry Association
- NeSSIE Project: a pilot project that aims to define three other pilot projects, demo-cases, with the aim of identifying new
 materials and industrially advanced technologies organised by TASTER, a consortium companies for innovation and
 technology transfer between the Emilia-Romagna Region, the Universities, CNR, ENEA, INFN and the regional cluster of
 the Chambers of Commerce











Internationalization & Capacity Building for a Sustainable Business Environment in Oil & Gas Producing Countries



Clypea Innovative Network for Future Energy



Silvia Grandi, Directorate General Environmental Security, Italian Ministry for Economic Development



Davide Crippa, Undersecretary of the Italian Minister for Economic Development



Fabio Fava, Full Prof. of Industrial & Environmental Biotechnologies, Univ. of Bologna



Tech Talks

OMC 27-29 \(\text{2019 March 2019 E} \)







12 TECH TALKS:



























Youth Program - Fuelling the Future Energy Professionals

OMC 27-29 \(\text{2019 March 2019 E} \)

Youth Arena - Meeting the Energy Industry.

450 university students coming from many Italian universities (Milan and Turin Polytechnics, University La Sapienza of Rome, University of Pisa, Chieti, L'Aquila, Potenza, Ravenna, Trieste and Bologna) met leading companies in the Italian and international energy sector in an open debate.



Two Lectures

- "New energy prospects and 'transitions' and their impact on the engineering and construction industry"
 Daslav Brkic
- "Narrative mindset to build the future of engineering and construction companies"
 Francesca Marchegiano





Youth Program - Fuelling the Future Energy Professionals



Student Paper Contest, by SPE (Society of Petroleum Engineers) for the MSc and PhD categories completed the Youth Programme.

Winners of the contest were:

- **Nicolò Lontani**, from Polytechnic Milan, won the master section with his work "VIVACE (Vortex Induced Vibrations for Acquatic-Clean Energy): Converter as a solution for the upgrading and requalification of offshore platforms";
- **Riccardo Borghi**, from Polytechnic Milan, was the runner-up in the same section and was awarded the prize for "Best paper overall", best absolute presentation, with "Sensitivity analysis and decision trees for the identification of the cause of pressure oscillations in Oil & Gas production systems".
- **Ali Islam**, from Al Azar University in Cairo won the category doctoral graduates: "A new approach to improving reservoir modelling via artificial neural network".
- Gianmaria Pio, from the University of Bologna, second classified in this section with "Modelling liquefied natural gas pool fire".



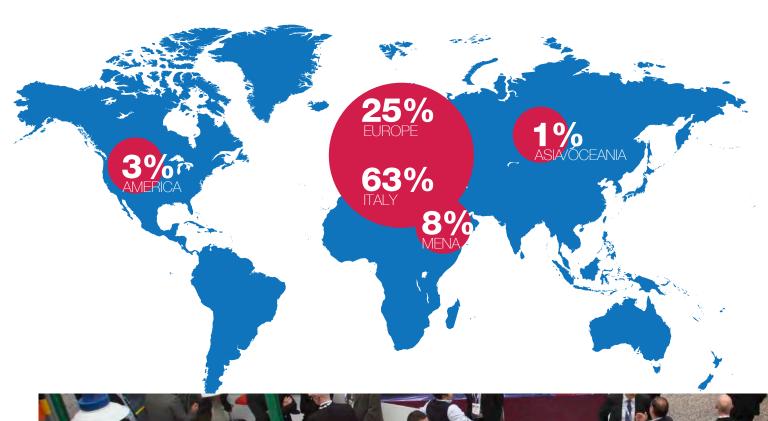


Exhibition - Venue Map





600 EXHIBITORS FROM 33 COUNTRIES



Exhibitors by

INDUSTRY SECTOR

20% PROCESS EQUIPMENT / FACILITIES

19% valves/actuators/pumps/piping

17% OIL AND GAS OPERATORS / E&P

10% HEALTH / SAFETY / ENVIRONMENT (HSE)

9% DRILLING AND COMPLETIONS

9% AUTOMATION / IT

7% MARINE EQUIPMENT & SERVICES

5% POWER SUPPLY

4% TRANSPORTATION / LOGISTICS



23,400 PARTICIPANTS FROM 37 COUNTRIES

Attendees by

JOB FUNCTION

- > Heads of oil/gas companies
- > Managers and employees of energy companies
- > Representatives of environmental companies
- > Representatives of government institutions
- > Engineers
- > Technical Managers
- > Geologists
- > Specialists of oil and gas companies
- > Service Companies
- > Representatives of construction companies
- > Representatives of transport companies
- > University & Researchers

Attendees by

INDUSTRY SECTOR:

22% ENGINEERING

18% SALES

15% SENIOR MANAGEMENT / CEO

14% DEVELOPMENT

10% MARKETING & COMMUNICATION

9% CONSULTING

4% LOGISTICS

3% RESEARCH

OMC 27-29 \(\text{2019 March 2019 E} \)



Laura Castelli, Deputy Minister - Ministry of Economy and Finance, visiting the Exhibition



The Energy Cradle and the Power Buoy at Eni stand







Exhibition

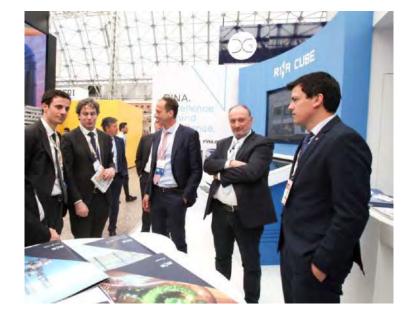
OMC 27-29 \(\frac{2}{2} \) 2019 March 2019 \(\frac{2}{2} \) RAVENINA

LOBAL SOLUTION PROVIDER









Davide Crippa,
Undersecretary of the
Italian Minister for
Economic Development

OMC 27-29 \(\) 2019 March 2019 \(\) 2019 RAVENNA

The core of the OMC event is undoubtedly the exhibition, with over **30,000 square meters**, that hosted **600 companies** of the Italian, European and international energy supply chain, in 7 exhibit halls for indoor displays and an external area of over 3,000 square meters, with over 4,500 exhibitor representatives during the days of the event as evidence of the great know-how of the professionals in this sector.









51% of the exhibiting companies came from the Italian regions (Emilia Romagna, Lombardy, Piedmont, Veneto, Lazio, Tuscany, Puglia, and Campania), 27% from European countries (Belgium, Bulgaria, Croatia, Finland, France, Germany, Greece, Hungary, Malta, Montenegro, Norway, Romania, Russia, Spain, Sweden, Switzerland, The Netherlands, Ukraine, United Kingdom), 16% from Middle East and North Africa (Egypt, Iran, Israel, Libya, Mozambique, Oman, Turkey, UAE), 5% from North America (USA), and 1% from Asian countries (Korea, China).

Exhibition

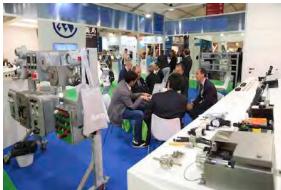
OMC 27-29 \(\) 2019 March 2019 \(\) RAVENNA

















OMC 2019 AWARDS: BEST PAPERS AND BEST STANDS





BEST PAPERS:

Technology & Innovation "New pendular floater for offshore wind commercial farms" presented by Thierry Delahaye, Paul Frank, Cristophe Colmard, Frederic Gentil - Saipem

HSE & Sustainability - "H25 Detection while drilling: a new approach" presented by Luca Mascheroni - Geolog

Digital Transformation "A novel machine learning-based tool support for source rock identification from biomarkers data: theory and case studies" presented by Alfonso Amendola, Angelo Riva, Sara Camici - Eni, together with Alex Turola, Massimo Zampato - Eniprogetti.

ENGINEER OF TOMORROW:

The prize went to Slimane Ouakka (University of Bologna), Sanjay Arwade, Amber Kapoor, Matthew Lackner (University of Massachusetts), Rochele Lunquist, Julie Worshop (University of Colorado at Boulder), Andrew Mayers (Northeastern University) for their paper "Mediacanes, Mediterranean hurricane eyewall winds action on offshore wind turbines".

BEST STANDS

BONATTI - Technological Architecture

PROGER - Creative & Captivating Design

EGPC - Effective Brand Communication

CEA - Most Original Shell - Jury Special Prize for Customization



Social Events

OMC 27-29 \(\text{2019 March 2019 E} \)







OMC is also an opportunity to network outside the box: the social and side events allowed the partcipants to have informal meeting opportunities, such as the *Golf Tournament*, sponsored by ROCA, the *Welcome Cocktail* promoted by the Ravenna Chamber of Commerce, the *Gala Dinner* sponsored by Eni, and finally the *Baroque Music Concert* in the Basilica of Sant' Apollinare Nuovo in the city center, promoted by Proger in cooperation with the Ravenna Festival Foundation.





The Figures of an Outstanding Success



23.400	Attendees
30.000 sqms	Overall Area
600	Exhibiting companies
1.100	Delegates
37	Attending countries
24	Sponsors
10	Supporting associations
11	Associated companies
48	Media partners







The Closing Message

"As organizers - commented Innocenzo Titone, Chairman of OMC 2019 - we are very satisfied with this edition both for the presence of 600 exhibiting companies and for the number of visitors, but what really satisfies us the most is the quality of the networking between visitors and exhibitors, which creates a continuity of long-lasting relationships".



The Undersecretary of the Italian Minister for Economic Development, Davide Crippa, present on the closing day, was able to verify for himself the importance of the Italian oil & gas sector in the general energy scenario. Not surprisingly, he stated that "oil & gas companies will have a significant role in the upcoming years also preparing young professionals who will operate in the renewable energy sector."

"Thus - added Titone - the oil & gas industry must remain alive to lead the transition towards renewables. We are no longer talking about only oil & gas companies, but companies in the energy sector ".

THANK YOU TO OMC ASSOCIATED COMPANIES





















OMC 27-29 \(\text{2019 March 2019 ENNA E} \)

THANK YOU TO OMC **SPONSORS AND CONTRIBUTORS**













BREDA



















FONDAZIONE

CASSA DI RISPARMIO DI RAVENNA

























ENERGIA







Associazione Imprese.

Italiane di Strumentazione







OMC 27-29 \(\text{2019 March 2019 E} \)

THANK YOU TO OMC MEDIA AND SOCIAL **PARTNERS**

SHOW DAILY EDITOR



OFFICIAL MAGAZINE



EXPLORATION MAPS SUPPLIER



MEDIA PARTNERS









































































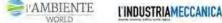
















WE ARE NOW PREPARING FOR 2021



23-25 MARCH 2021 RAVENNA - ITALY

RETHINKING ENERGY TOGETHER

Alliances for a Sustainable Energy Future

www.omc.it

STAY TUNED ON OMC SOCIAL NETWORKS

Organised by









