



**cmcc**  
Centro Euro-Mediterraneo  
sui Cambiamenti Climatici



# Annual Report 2018





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sui Cambiamenti Climatici

# Annual Report 2018

**CMCC Annual Report 2018**

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# Mission

To investigate and model our **climate system** and its interactions with **society** to provide reliable, rigorous, and timely **scientific results** to stimulate sustainable growth, protect the **environment** and **develop science driven** adaptation and **mitigation policies** in a **changing climate**.  
To develop foresights and quantitative analysis of our future planet and society.

# Values

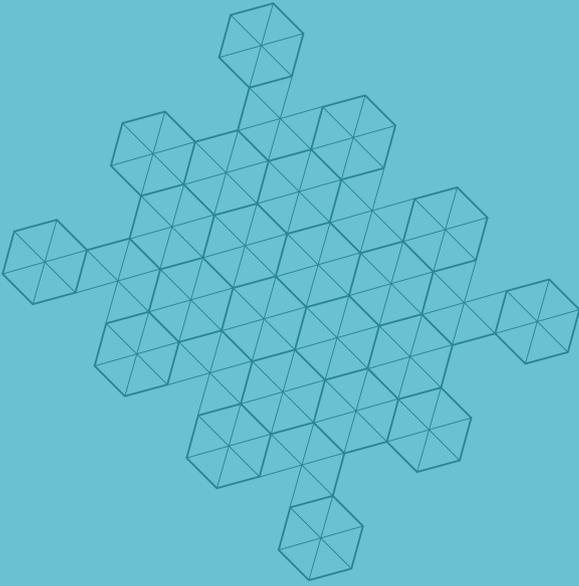
**CMCC IS** CMCC is committed to inform and facilitate the dialogue between scientists, decision makers and the general public to support decisions and actions for the benefit of society and environment.

**CMCC IS** CMCC is committed to encourage discipline convergence to spur new and creative ideas and to ensure that environmental observations, analyses, predictions and services most effectively meet the needs of society.

**CMCC IS** is an equal opportunity employer, actively promoting diversity in the workplace.

**CMCC IS** CMCC is a non advocacy institution.





CMCC Foundation

# CMCC: origins and aims

Cutting-edge research to investigate and to address the Climate Change Challenge.

CMCC Foundation (Fondazione CMCC - Centro Euro - Mediterraneo sui Cambiamenti Climatici, Euro-Mediterranean Center on Climate Change) is a research organization that conducts and promotes scientific and applied activities within the scope of international climate change research.

CMCC aims to gain in-depth knowledge on climate variability, its causes, and its consequences, through the development of high-resolution simulations using global models of the Earth System as well as regional models, focusing in particular on the Mediterranean area.

The specific objective of these research studies is to provide scientifically reliable, rigorous and updated results that will help to investigate, understand and represent the interactions between the climate system, the marine and terrestrial ecosystems, and society.

CMCC was created in 2005 with the financial support of the Ministry of Education, University and Research (Ministero dell'Istruzione, dell'Università e della Ricerca - MIUR), the Ministry of the Environment, Land and Sea (Ministero dell'Ambiente e della Tutela del Territorio e del Mare - MATTM), the Ministry for Agricultural and Forestry Policies (Ministero delle Politiche Agricole e Forestali - MIPAF) and the Ministry of Finance (Ministero delle Finanze - MEF). It is a non-profit research center that acts as an institutional reference point, both at national and at international level, for policy decision-makers, public bodies as well as public and private entities, whenever they require technical-scientific support.

On 10th December 2015 the Center became a Foundation, therefore, representing CMCC's legal status, its contents, aims and operational modalities.



The Center is organized in the form of a network distributed throughout the country with locations in Lecce, Bologna, Capua, Milano, Sassari, Venezia, and Viterbo which involves and connects public and private entities working together on multidisciplinary studies concerning issues of interest to the climate sciences.

# The Network

# Governance

The CMCC Foundation's research lines and activities are implemented through the active involvement of the CMCC's consortium members and through the sharing of their internal resources.

The CMCC Foundation relies on the extensive and established research experience of the nine members and institutional partners:

- ● ● ● **Istituto Nazionale di Geofisica e Vulcanologia (INGV)** ● ● ● ●
- ● ● ● **Università del Salento** ● ● ● ●
- ● ● ● **Centro Italiano di Ricerche Aerospaziali (CIRA S.c.p.a.)** ● ● ● ●
- ● ● ● **Università Ca' Foscari Venezia** ● ● ● ●
- ● ● ● **Università di Sassari** ● ● ● ●
- ● ● ● **Università della Tuscia** ● ● ● ●
- ● ● ● **Politecnico di Milano** ● ● ● ●
- ● ● ● **Resources for the Future** ● ● ● ●
- ● ● ● **Università di Bologna** ● ● ● ●

The General Meeting of Shareholders appoints:

- **Board of Directors (Board)**, with ordinary and extraordinary management powers, which has a three-year term of office and is composed of 9 members
- **the Executive Committee**, to which the Board delegates technical and financial matters

### **Board of Directors**

**Antonio Navarra** – INGV (CMCC President)

**Fabio Florindo** – INGV

**Antonio Marcomini** – Università Ca' Foscari Venezia

**Riccardo Valentini** – Università della Tuscia

**Alessandro Coletta** – CIRA

**Marino Gatto** – Politecnico di Milano

**Giuseppe Grassi** – Università del Salento

**Luigi De Bellis** – Università del Salento

**Giorgiana De Franceschi** – INGV

**Antonino Rotolo** – Università di Bologna

### **Executive Committee**

**Antonio Navarra**

**Luigi De Bellis**

**Riccardo Valentini**

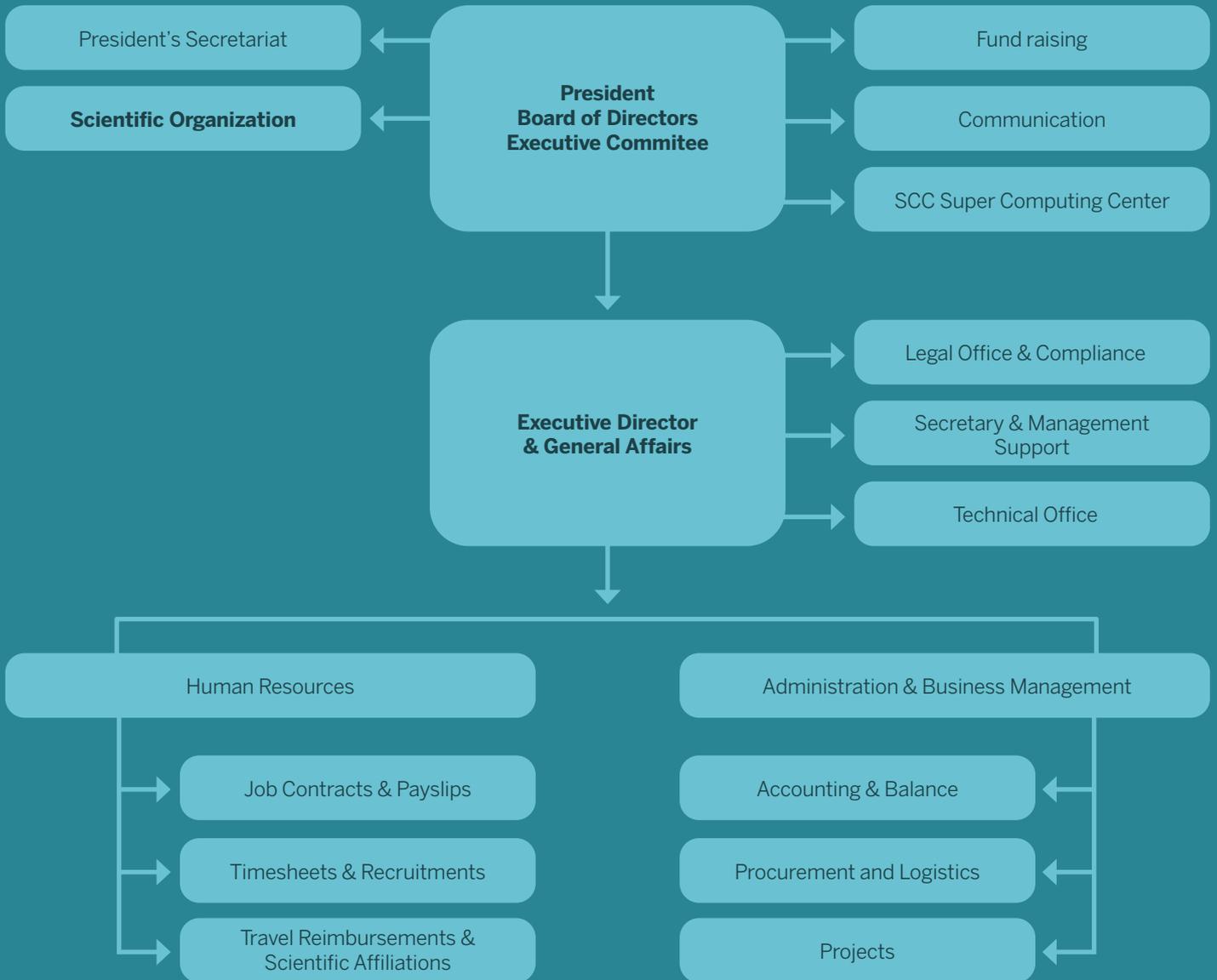
### **Executive Director**

**Laura Panzera**

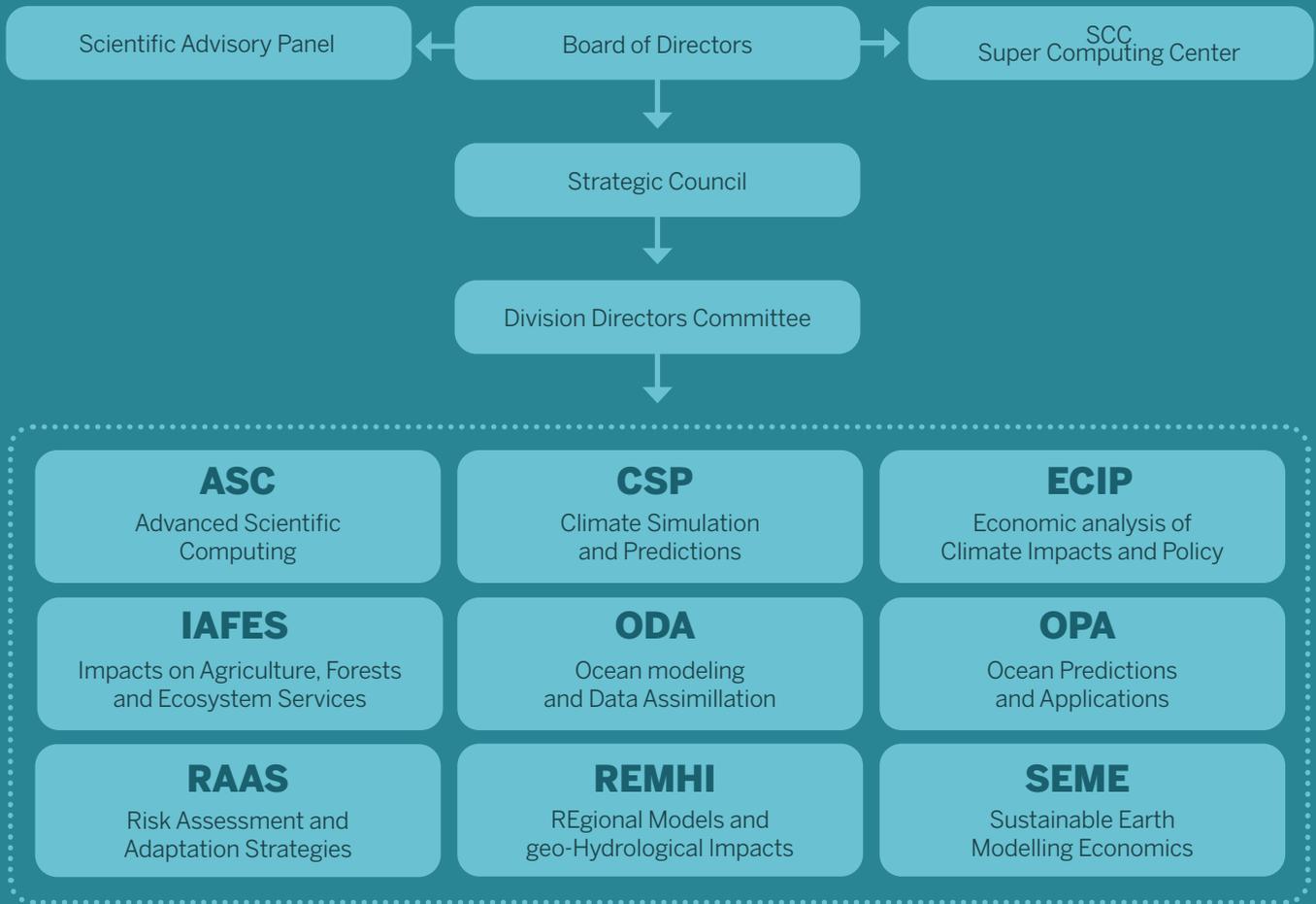


CMCC has obtained and implemented a Quality Management System which complies with standards of UNI EN ISO 9001:2008 for the activities concerning the Administrative management of research projects relating to climate change".  
Certificate N. 18049

# Administration and Management



# Scientific Organization



# Scientific Research

The CMCC scientific organization aims at enhancing the integration and collaboration among interdisciplinary skills needed to deal with climate sciences related topics.

The CMCC benefits from the experience and contributions of the bodies that advise, design and coordinate the Center's scientific activities. These include: the Scientific Advisory Panel (SAP), the Strategic Board, the Division Directors Committee, the Research Divisions, the Strategic Partnerships and the Supercomputing Center.

**The Scientific Advisory Panel (SAP)** provides advice on CMCC's research activities, strategic plan, and organization, as well as support on specific matters raised by the Chairman of the Board. It is appointed by the Board and is made up of eight highly qualified experts selected among the international scientific and academic community. Members of the SAP are appointed with a rotation mechanism: every three years, four new members are appointed, four of the old members are confirmed and the four old members not confirmed are appointed as "Honorary Fellows".

## **Scientific Advisory Panel**

**Peter Bauer** – ECMWF - European Centre for Medium-Range Weather Forecasts

**Bart Muys** – Leuven University - Forest, Nature and Landscape

**Carolyn Fisher** – Resources for the Future

**Walter Oechel** – University of California

**Joe Tribbia** – NCAR - Head Climate Dynamics and Predictability

**Sabrina Speich** – École normale supérieure

**Nadim Farrokh** – International Centre for Geohazards

**Daniela Jacob** – ClimateServiceCenter

**Giulio Boccaletti** – The Nature Conservancy (Honorary Fellow)

**Ghassem Asrar** – Joint Global Change Research Institute (Honorary Fellow)

**Strategic Board** has a function of strategic direction and supervision. Composed of the Scientific Coordinators of CMCC, the Strategic Board defines scientific strategies and new subject areas and problems, contributing with the experience, creativity and international network of relations of its members. The Strategic Board is appointed by the Board of Directors and identifies its coordinator from within. One of the main tasks of the Strategic Board is to define on a three-year basis CMCC's Strategic Projects.

### **Strategic Board Members**

**Giovanni Aloisio**  
**Carlo Carraro**  
**Marino Gatto**  
**Alessandro Lanza**  
**Antonio Marcomini**  
**Antonio Navarra**  
**Nadia Pinardi**  
**Pasquale Schiano**  
**Donatella Spano**  
**Riccardo Valentini**

The **Division Directors Committee** is composed of the Division Directors, who meet on a monthly basis to coordinate their operations. The group appoints a coordinator from within. The Leadership Group relies on the Strategic Board.

### **Division Directors Committee**

**Alessandro D'Anca** – Advanced Scientific Computing  
**Silvio Gualdi** – Climate Simulations and Predictions  
**Francesco Bosello** – Economic analysis of Climate Impacts and Policy  
**Valentina Bacciu** – Impacts on Agriculture, Forests and Ecosystem Services  
**Monia Santini** – Impacts on Agriculture, Forests and Ecosystem Services  
**Simona Masina** – Ocean Modeling and Data Assimilation  
**Giovanni Coppini** – Ocean Predictions and Applications  
**Paola Mercogliano** – Regional Models and Hydrogeological Impacts  
**Jaroslav Mysiak** – Risk Assessment and Adaptation Strategies  
**Silvia Torresan** – Risk Assessment and Adaptation Strategies  
**Massimo Tavoni** – Sustainable Earth Modelling Economics

# Research Divisions

The CMCC research network is distributed among nine research divisions that share different knowledge and skills in the field of climate sciences.

## **Advanced Scientific Computing**

The Advanced Scientific Computing (ASC) Division carries out R&D activities on Computational Science applied to the Climate Change domain. In particular, it focuses on (i) the optimization of numerical models on HPC architectures (High End Computing – HEC), (ii) the management, analysis and mining of large volumes of scientific data looking forward at exascale scenarios (Data Science and Learning – DSL), (iii) user-friendly interfaces, workflows and applications (Usable Software and Systems – USS), and (iv) research on innovative digital platforms and tools for the delivery of new services in different sectors, such as agriculture, climate, disaster risk reduction, oceanography, water management, etc. (Production Platforms for Operational Services (PPOS)).

## **Climate Simulations and Predictions**

The Climate Simulations and Predictions (CSP) Division contributes to the development of the CMCC climate and earth system models, and uses them to explore and improve our understanding of the mechanisms underpinning climate variability, climate predictability and climate change, by means of numerical simulations. In collaboration with the ODA Division, CSP produces climate change scenarios, contributing to the World Climate Research Programme (WCRP)'s Coupled Model Intercomparison Project (CMIP) project, to inform the Intergovernmental Panel on Climate Change (IPCC) assessments and in support of emerging climate service activities. Furthermore, CSP produces operational climate forecasts from seasonal to multi-annual time scales.

## **Economic analysis of Climate Impacts and Policy**

The Economic analysis of Climate Impacts and Policy (ECIP) Division aims to characterize economically different climate change scenarios. This consists firstly in the development of economic assessments of climate change impacts. This research area requires on the one hand to translate, in collaboration with the other divisions of CMCC, the physical impacts of climate change in economic terms. On the other hand, it requires to develop scenarios of social economic development on which climate change will occur. The second research area of the division is the evaluation and design of effective and feasible policies to adapt to climate change.

### **Impacts on Agriculture, Forests and Ecosystem Services**

The Impacts on Agriculture, Forests and Ecosystem Services (IAFES) Division's Lines of Activities focus on the diagnosis and prediction of the climate change impacts on agriculture and on terrestrial natural and semi-natural ecosystems, and on the services they provide, at local to global scale. The activities comprise basic and applied research, up to operational purposes in the context of ecosystem services.

Particular attention is paid to the monitoring, modeling and analysis of:

- Agriculture and the water and nutrients' requirement, including the ecological footprint;
- Carbon cycle through soil-water-vegetation-human environment dynamics, including their feedbacks to the climate system;
- Soil water balance and hydrological cycle at different scales, considering the different uses and services of water resources;
- Land use and land degradation up to desertification;
- Prevention, planning and managing wild fires and the consequent emissions;
- Exposure, vulnerability and risk of vegetation and rural-urban and forest-urban interfaces to the fire danger.

All these activities are supporting strategies for the mitigation of and adaptation to climate change.

### **Ocean modeling and Data Assimilation**

The Ocean modeling and Data Assimilation (ODA) Division focuses on the development and improvement of the CMCC Earth System Model components with a particular emphasis on the physical and biogeochemical ocean models. Another major activity of the ODA division is the development of data assimilation methods for the production of global marine reanalysis and forecasting. Finally, since recently we started to work also on ice-sheet and paleoclimate modeling.

### **Ocean Predictions and Applications**

The Ocean Predictions and Applications (OPA) Division deals with the development of models and methods for interdisciplinary research on marine operational forecasting, on the interactions between coastal areas and the open ocean, on the development of services and applications for all maritime economy sectors, including transport, security and management of coastal areas and marine resources, in the context of climate change adaptation problems.

### **Risk Assessment and Adaptation Strategies**

The Division Risk Assessment and Adaptation Strategies (RAAS) brings together research groups with sizable expertise and long-standing experience in climate risk analysis and assessment, and development of adaptation strategies and policies, previously affiliated with other research divisions. The research priorities embrace three major themes that denote the main research units: economic analysis of risk and disaster risk reduction; environmental risk assessment and management; governance of climate related risks and adaptation.

### **REgional Models and geo-Hydrological Impacts**

The main activities of REgional Models and Hydrogeological Impacts (REMHI) Division include studies about: regionalization of the climatic signal through the development and use of statistical and dynamical downscaling approaches, and qualitative and quantitative evaluation of the effects of climate changes and anthropogenic pressure on the geo hydrological hazards (such as landslides, floods and droughts). Furthermore, the Division develops and implements procedures able to optimize the link between climate and impacts models, and tools for the correct quantification of the associated uncertainty.

### **Sustainable Earth Modelling Economics**

The Sustainable Earth Modelling Economics (SEME) Division analyses the transition to sustainability, helping identify and evaluate low carbon, sustainable strategies. The approach used is multidisciplinary, with strong use of quantitative methods based on data science, integrated modeling and experimental and behavioral economics.

## Strategic Partnerships

### **RFF-CMCC European Institute on Economics and the Environment (EIEE)**

RFF-CMCC European Institute on Economics and the Environment is the result of the strategic partnership between CMCC and RFF - Resources for the Future, the independent, nonprofit research institution based in Washington, DC whose mission is to improve environmental, energy, and natural resource decisions through impartial economic research and policy engagement.

EIEE is committed to being a central focal point for research insights and policy solutions within Europe, and connecting that work internationally. The Institute's economic and environmental research aims to facilitate the transition to a sustainable, inclusive society. The focus is on issues surrounding but not limited to climate change, including a wide range of environmental, energy, natural resource and societal issues. Topics include how to evaluate strategies and policies to stabilize climate change, eliminate energy poverty, improve air and water quality, study human migration and green innovation.

While an economic and policy lens on these issues is central to EIEE's mission, specific activities benefit from a broad, multidisciplinary approach to understanding of issues and identification and analysis of solution options. EIEE has strong competencies on quantitative methods, but also incorporates insights from qualitative and behavioral sciences. Computational models - integrated assessment models (IAMs), agent base models (ABM), energy models - are used to study the economics of climate mitigation and adaptation, and the transition to a low carbon world. Empirical methods shed light on clean innovation and technical change, and human migration. Experimental methods based on randomization allow testing in the field economic and behavioral interventions to promote pro - environmental behavior.

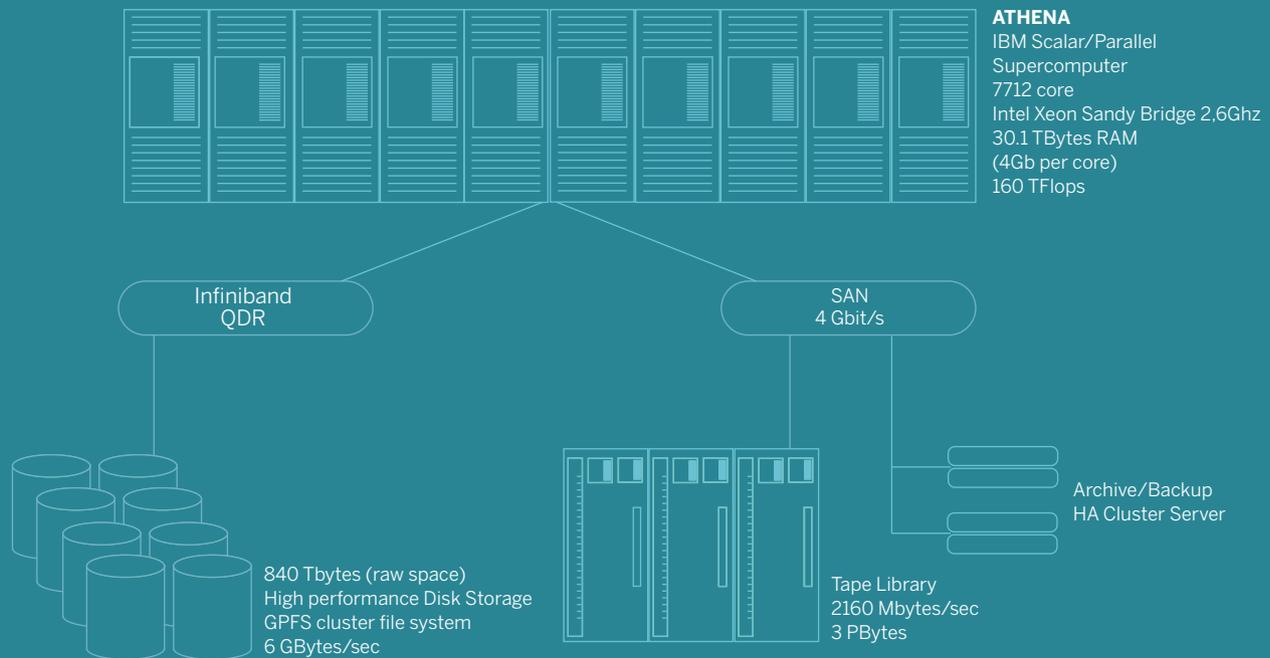
More info on the website: [eiee.org](http://eiee.org)

### **CMCC@Ca'Foscari**

CMCC@Ca'Foscari is the new research center on climate change, the result of a strategic partnership between Ca' Foscari University of Venice and the CMCC Foundation – Euro-Mediterranean Center on Climate Change. Thanks to the sharing of resources and skills of these two organizations, CMCC@Ca'Foscari is today the most important climate research center developed by an Italian university. It can count not only on a team of about 50 researchers and professors, but also on the technological and modeling CMCC infrastructure, including a supercomputer among the most powerful in Europe dedicated to the modeling and forecasting of future climate and to the assessment of the economic repercussions of climate change.

Based at VEGA – Venice Science and Technology Park, the multidisciplinary task force set up within CMCC@Ca'Foscari includes climatologists, economists, chemists and statisticians, who carry out national and international research on the interaction between the climate, the environment, the economy and society. CMCC@Ca'Foscari aggregates the CMCC research groups belonging to the ECIP – Economic analysis of Climate Impacts and Policy Division and RAAS – Risk Assessment and Adaptation Strategies Division, as well as scholars of Ca' Foscari's Department of Environmental Sciences, Informatics and Statistics and Department of Economics.

# The Supercomputing Center



Housed in the Ecotekne complex (Lecce), the CMCC's Supercomputing Center provides the technological infrastructure and the computational capabilities needed in order to develop simulations and models able to provide more accurate, detailed and better defined results.

The main facility of the Supercomputing Center is the Athena system based on 482 IBM iDataPlex compute nodes. Each node is a dual Intel E5-2670 processor working at 2,6 GHz. Athena has a computing capability of 160TFlops (160,000 billions operations per second).

The design of the computing architecture, comprised of the IBM dx360M4 server cluster, the InfiniBand interconnection network and the storage subsystem, accelerates research activities and improves the quality of the scientific research for the development of future climate change scenarios and impacts.

The huge amount of data produced by CMCC researchers is managed by a DLM system based on a hierarchical storage management solution (HSM). HSM allows data storage on different tiers based on specific policies, enabling administrators to migrate and store data on the most appropriate tier and enabling transparent data access.

In order to meet the increasing needs of computational power and storage capacity in line with the challenge related to global Earth system modelling and climate sciences, CMCC is upgrading the Supercomputing Center. The new supercomputing infrastructure will be deployed in the first half of 2019.

The CMCC Supercomputing Center, directed by prof. Giovanni Aloisio, is the only computational facility in Italy specializing in Climate Change research.



# FACTS and FIGURES



# People

People working at CMCC are an essential resource that provides and ensures the quality of scientific research, the effective performance of administrative and organizational activities, and the maintenance and development of technological structures and equipment. Therefore, CMCC's main goal is to make the most of the potential and talents of those who work for the CMCC.

The Center is also committed to developing and increasing the skills and knowledge of its employees in their respective areas, in order to achieve research objectives as well as to enrich the global community.

The Center structure and interdisciplinary activities carried out at CMCC, promote teamwork and integration. A proactive and flexible spirit is encouraged by initiatives that include advanced training, brainstorming and group activities.

The interdisciplinary approach that characterizes CMCC's work requires and contributes to the creation of specializations that are not easily available in the external market, and their growing value encourages the Center to make increasing investments in the quality of the processes related to the management of human resources.

Achieving a quantitative analysis of the staff who contributed to the activities of CMCC during 2017 means considering many types of contracts and collaborations whose duration does not always coincide with the calendar year. For this reason, in order to integrate this complexity into a coherent account with reality, we have perfected the calculation of full-time equivalent (FTE) considering a single number of hours per year for all types of contracts with CMCC employees\*.

During 2018, according to calculations made with the policy described above, the number of people who worked at CMCC is equal to 161 FTE, including both staff and collaborators. People who carry out scientific and technical activities prevail, while around 29% of the staff perform administrative roles and carry out communication activities.

CMCC confirms its vocation as a research institution that places great confidence in the younger generation: in fact, the percentage of people under age 40 is more than 50%, while those who are over 50 are 12%.

## People

To submit a CV to the CMCC Human Resources Office, join the Job Application Manager:

**[www.cmcc.it/jam](http://www.cmcc.it/jam)**

\* The FTE is calculated by dividing the total number of hours worked by an employee with the number of hours a full-time employee would work in one year. For example, if 1,744 is the total number of hours a full-time employee would work in one year, an employee who works 872 hours would be a 0.5 FTE.

	<b>TOTAL</b>	<b>M</b>	<b>F</b>
People at CMCC	<b>161</b>	84	77

### **AREA**

Administration, management and communication	<b>46</b>	16	30
Scientific / Technical	<b>115</b>	68	47

### **AGE**

Under 30	<b>14</b>	11	3
31 - 40	<b>74</b>	31	43
41-50	<b>54</b>	32	22
Over 50	<b>19</b>	10	9

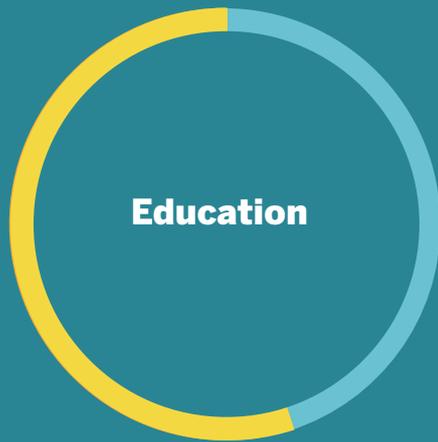
### **NATIONALITY**

Italian	<b>147</b>	75	72
EU non Italian	<b>10</b>	6	4
Extra EU	<b>4</b>	3	1

### **POSITION**

Senior	<b>71</b>	39	32
Junior	<b>90</b>	46	45

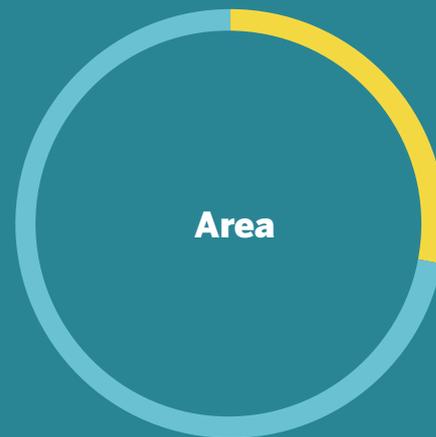
# People at CMCC



**55%**  
non PhD

**45%**  
PhD

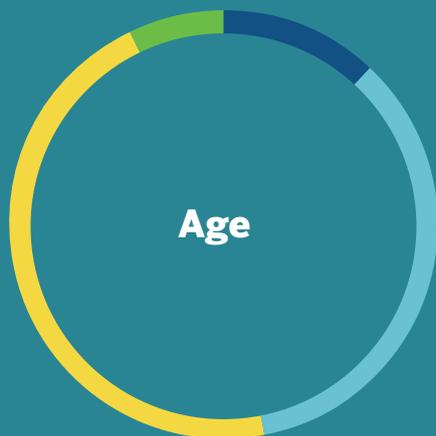
**Education**



**71%**  
Scientific  
and Technical

**29%**  
Administration,  
Management and  
Communication

**Area**



**12%**  
over 50

**35%**  
41-51

**46%**  
31-40

**7%**  
under 30

**Age**

Women at CMCC are



**87%**  
Italian

**9%**  
UE non Italian

**4%**  
Extra UE

**48%**  
of the people at CMCC

**47%**  
of senior positions



**56%**  
Junior

**44%**  
Senior

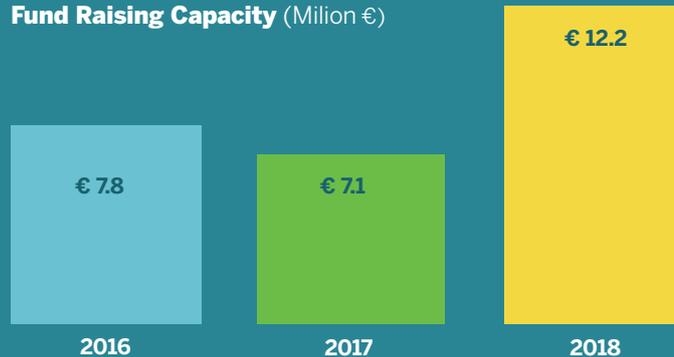
**52%**  
of people with PhD

# Research Projects

With 93 projects running and managed during 2018, at 31 December 2018 CMCC's project portfolio reached the number of 321 projects, half of them having CMCC as Lead Partner and Coordinator.

**Fund Raising Capacity:** the graph shows CMCC capacity of attracting new funds over the last three years. These funds are over and above the annual operating grants.

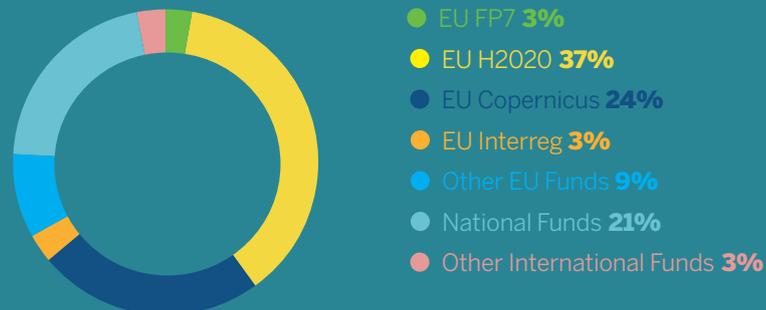
**Fund Raising Capacity** (Million €)



The pie chart below highlights the funding agencies and programmes of the last five years CMCC's active projects. A considerable part (37%) is represented by research projects funded through the **European Horizon 2020 (H2020)** programme, which officially started in 2014. Along the same time span, around 3% of active research projects are the last projects funded by the EU Seventh Framework Programme (FP7), the programme being officially closed in 2013. This confirms the research oriented effort of the Foundation together with the always-growing interest into service oriented Copernicus projects.

These funds represent an increasing and sensitive share of CMCC origin of funding along with the – always present - national, EU and international funds.

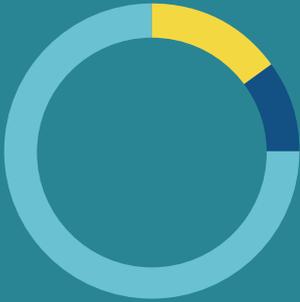
**Origin of funding** (per budget)



CMCC's capability and success in acquiring new funds from **Horizon 2020**, the main EU funding programme dedicated to research, has been confirmed in 2018.

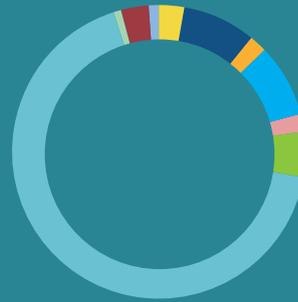
As in 2017, CMCC has been involved in all three pillars "Excellence Science", "Industrial Leadership" and "Societal Challenges"; and in the main Work Programmes of CMCC interest.

### CMCC Participation into H2020 Work Programs



- Excellent Science **15%**
- Industrial Leadership **10%**
- Societal Challenges **75%**

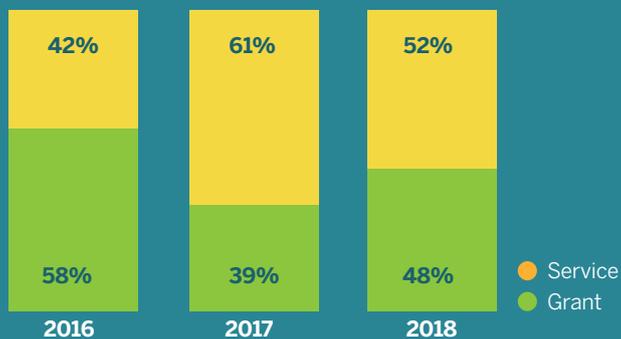
### CMCC Participation into H2020 Work Programs



- 3. Marie Skłodowska - Curie Actions (MSCA) **3%**
- 4. European Research infrastructure **8%**
- 5. i. ICT **2%**
- 5. iii. ISpace **8%**
- 8. Health, demographic change and wellbeing **2%**
- 9. Food security **5%**
- 12. Climate action, environment, resource efficiency and raw materials **67%**
- 14. Secure Societies **1%**
- 1. ERC **3%**
- 2. Future and Emerging Technologies **1%**

The technical activities performed by CMCC (funded through service contracts) have been increasing over the last years, and despite the great number of projects funded through research grants there has been a significant increase of awarded service contracts over the last year.

### Type of Funding % per n. projects



### Type of Funding % per budget



# Publications

CMCC's editorial production is addressed to a diverse audience that includes the scientific community, policy decision makers, opinion leaders, and a general public interested in staying abreast of issues related to climate change research and policies. Therefore, the different types of publications issued by CMCC take into account the different recipients of the published information in terms of form and content.

## **Refereed papers**

Intended for an expert and specialized readership, scientific publications are one of the main tools used to disseminate the results of CMCC's activities among the international scientific community. Works considered for publication include articles and papers published by CMCC researchers in peer-reviewed journals, many of which are included in the Journal Citation Report (JCR). The selected papers represent a tangible indicator of the quality of the Center's scientific production, resulting from a multidisciplinary interaction between research divisions and from collaborations with major international institutions.



**81**

refereed papers  
published in **2018**

# Training Programs

Education programs are a very important part of the wide range of activities carried out by CMCC. The Graduate Programs, as well as the summer schools and winter schools, have earned an outstanding reputation over time within the climate change scientific community, thanks to the high level and international breadth of their offering and to partnerships with European universities, international institutions and world-famous experts participating as professors and guest speakers.

## CMCC Graduate Programs

Were inaugurated in 2008, in collaboration with three Italian universities (Università Ca' Foscari Venezia, Università del Salento and Università di Sassari) with the objective of promoting and coordinating advanced studies on the impacts of climate change and climate policies. The programs offer advanced courses and research activities, with a special focus on themes concerning innovative management strategies, both from a physical and a socio-economic perspective, for phenomena related to the climate and its changes.

CMCC Graduate Programs are organized in collaboration with partner Universities and through their PhD programmes:

- **Science and Management of Climate Change** (Ca' Foscari University of Venice)
- **Agrometeorology and Ecophysiology of Agricultural and Forestry Eco-Systems** (University of Sassari)
- **Future Earth, Climate Change and Societal Challenges** (University of Bologna)
- **Biological and Environmental Sciences and Technologies and Complex Systems Engineering** (University of Salento)
- **Sciences, Technologies and Biotechnologies for Sustainability** (University of Tuscia)

Addressed to researchers already engaged in scientific activities with CMCC as well as to external students, the Center's educational initiatives aim to improve the participants' research performance, provide opportunities for professional growth and take full advantage of the energy and motivation of the younger generations - a valuable resource

**165**

Students attending the  
CMCC Graduate  
Programs in **2018**

# Events

CMCC organizes different types of events to build and maintain an active dialogue with interlocutors including the scientific community, students, policy decision makers, public bodies, companies, the public opinion in general, and the media.

Throughout the Center's activities, events have proven to be an excellent vehicle to disseminate the contents of research activities, exchange opinions with the outside world, find new themes and areas of interest, strengthen existing collaborative relationships and start new ones with national and international research centers.

## **Seminars**

Intended mainly for a specialized audience, students of the Center's educational initiatives and the scientific community with the aim to encourage discussion and debate on frontier themes relating to climate research and policies.

## **Conferences**

Large scale events addressed to the public at large, with the participation of renowned international speakers in the area of climate research and policies.

## **Meetings**

Usually set up within the scope of scientific research and partnership projects, for the purpose of launching a project, defining technical aspects or disclosing scientific results.

## **Workshops**

Dedicated to CMCC researchers, they offer opportunities for brainstorming and updates on ongoing activities.



**115**

**115 total events published on the CMCC website**  
(organized by CMCC or with the participation of CMCC researchers)

### **CMCC WEBINARS**

The CMCC webinars series provides multidisciplinary insights on climate sciences and their interactions with socio-economic systems. With speeches and presentations given by experts from the CMCC research divisions and from other world-class institutions, the webinar series aims at involving the public at large in an interactive and comprehensive opportunity for a better understanding of the up-to-date scientific knowledge on climate change and its impact on the society, the environment, and the economics.



**26**

### **CMCC Webinars organized in 2018**

all the research Divisions involved

**Around 3,500**

total registered accounts attended the webinars



**18**

CMCC presenters

# Web & Media

**90,000**

(+30%) **Unique visitors**

**305,000**

(+30%) **Page views**

*accounts reached on monthly average*

**facebook**

+ **50%**

**Twitter**

+ **nearly 400%**

**Official website**  
[www.cmcc.it](http://www.cmcc.it)

[www.climateforesight.eu](http://www.climateforesight.eu)



[www.bestclimatesolutions.eu](http://www.bestclimatesolutions.eu)



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<https://medium.com/@CmccClimate>



**LinkedIn**

<https://it.linkedin.com/company/cmcc>



**Youtube**

<https://www.youtube.com/user/CMCCvideo>

# Financial Report

<b>BALANCE SHEET: ASSETS</b>	<b>2018</b>	<b>2017</b>
<b>A) Receivables from shareholders for contributions due</b>	<b>0</b>	<b>0</b>
<b>B) Fixed assets</b>	<b>1,267,348</b>	<b>1,529,339</b>
I. Intangible fixed assets	281,428	450,657
II. Tangible fixed assets	508,105	602,631
III. Financial assets	477,815	476,051
<b>C) Current Assets</b>	<b>16,049,945</b>	<b>12,917,566</b>
I. Inventories (Work in Progress - WIP)	9,681,350	8,087,479
II. Receivables	545,708	1,037,315
III. Current financial assets	2,000,000	1,919,000
IV. Cash at hand	3,822,887	1,873,772
<b>D) Prepayments and accrued income</b>	<b>21,355</b>	<b>33,909</b>
<b>TOTAL ASSETS</b>	<b>17,338,648</b>	<b>14,480,814</b>
<b>BALANCE SHEET: LIABILITIES</b>	<b>2018</b>	<b>2017</b>
<b>A) Net Liabilities</b>	<b>5,776,928</b>	<b>4,642,798</b>
Capital	606,000	556,000
Reserve Funds	4,086,798	2,980,696
Profit for the year	1,084,130	1,106,102
<b>B) Provisions for risks and charges</b>	<b>159,414</b>	<b>119,595</b>
<b>C) Employee Severance Indemnities</b>	<b>731,801</b>	<b>553,307</b>
<b>D) Payments from Clients</b>	<b>10,312,100</b>	<b>8,784,230</b>
<b>E) Accruals and deferred charges</b>	<b>358,405</b>	<b>380,884</b>
<b>TOTAL LIABILITIES</b>	<b>17,338,648</b>	<b>14,480,814</b>

<b>PROFIT AND LOSS</b>	<b>2018</b>	<b>2017</b>
<b>A) Revenues</b>	<b>13,393,533</b>	<b>12,578,572</b>
Revenues from sales and services	2,825,313	2,689,591
Variations in stocks (WIP)	1,651,173	-878,778
Other revenues	8,917,047	10,767,759
<b>B) Expenses</b>	<b>12,141,796</b>	<b>11,404,310</b>
Consumables	56,136	50,558
Services	5,317,498	5,426,887
Leases	335,558	287,307
Personnel	5,601,155	4,476,297
Depreciation	670,477	885,633
Other Operating Expenses	160,972	277,628
<b>Difference between revenues and expenses (A-B)</b>	<b>1,251,737</b>	<b>1,174,262</b>
<b>C) Financial income and charges</b>	<b>30,832</b>	<b>-30,096</b>
<b>D) Impairment on financial assets</b>	<b>0</b>	<b>0</b>
<b>E) Extraordinary income and charges</b>	<b>-169,561</b>	<b>0</b>
<b>Results before taxes (A-B±C±D±E)</b>	<b>1,113,008</b>	<b>1,144,166</b>
Income tax expenses - current and deferred	<b>28,878</b>	<b>38,064</b>
a) Current taxes	28,878	32,536
b) Deferred taxes	0	5,528
<b>Profit (loss) for the year</b>	<b>1,084,130</b>	<b>1,106,102</b>







**cmcc**

**Centro Euro-Mediterraneo  
sui Cambiamenti Climatici**

**CMCC Foundation  
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