
Page 1: Please provide the information requested below....

Q1 What is your organisation's/project's name?

EoCoE - Energy Oriented Center of Excellence

Q2 Your organisation's/project's website

www.eocoe.eu

Q3 Are you?

A project

Q4 Your name

Nathalie Girard

Q7 Please summarise who you are and what you do

The Energy oriented Centre of Excellence in computing applications (EoCoE: read as “Echo”) is one of the 8 centres of excellence in computing applications recently established within the Horizon 2020 programme of the European Commission. The primary objective of all the newly formed Centres of Excellence is to help strengthen Europe’s leadership in HPC applications by tackling challenges in topical areas such as renewable energy, materials modelling and design, molecular and atomic modelling, climate change, Global Systems Science, bio-molecular research, and tools to improve HPC applications performance. EoCoE uses the tremendous potential offered by the ever-growing computing infrastructure to foster and accelerate the European transition to a reliable low carbon energy supply using HPC (High Performance Computing). The centre will aid the transition to sustainable energy sources and usage via targeted support for numerical modelling in four pillars: meteorology, Materials, Water and Fusion. These pillars are embedded within a transversal multidisciplinary effort providing high-end expertise in applied mathematics and High Performance Computing (HPC). EoCoE, led by Maison de la Simulation (France), is structured around the Franco-German hub Maison de la Simulation - Jülich Research Centre. The project coordinates a pan-European network covering 21 teams in 8 countries with a total budget of 5.5 M€. Its partners are experts in HPC as well as on energy research, ensuring that EoCoE is fully integrated in the overall European strategy for HPC.

Q8 In what way would like to contribute to an EsD project?

As a HPC user ,

An an application provider

Q9 What would be your contribution to an EsD project?

EoCoE has several Exascale ready applications with associated scientific challenge with high societal impact. EoCoE would like to promote and test these applications on new EsD Platforms.

Expertise on HPC for Energy applications

Experience with refactoring complex ‘real-world’ production codes

Automated performance benchmarking using JUBE

Q10 What partners are you looking for?

A consortium taking of the hardware and low level software part of the EsD

Q11 Please include links to any additional material.

www.eocoe.eu/services

Q12 Other comments/ideas

Respondent skipped this question