

IMACLIM Network

2017 annual Workshop

November 2-3, CIRED, Nogent-sur-Marne, France

Workshop overview

The morning of day 1 focused on CIRED presentations about (1) the IMACLIM methodology and the different attached model versions, and (2) an overview of the Network's extension and some tentative principles that could frame its growing activity.¹ Beyond coming back on the core concepts underpinning IMACLIM models, the methodology presentation allowed situating the country models in the broader context of IMACLIM endeavours: macroeconomic models meant to be coupled to bottom-up models via an iterated exchange on linking variables, to convergence. The second morning session stressed the Network's extension including the recent prospects to reach to Argentina and Colombia—in addition to Russia. It then moved on to present tentative Network organisation principles, which received broad agreement by Network members. One important addition to the Network discussion was a call for structured methodological material to better explain and promote the IMACLIM approach (by COPPE-UFRJ). Another one was on the Network extending beyond teams implementing IMACLIM models, typically to teams engaged in similar hybrid modelling endeavours and willing to exchange experience on them (by KAPSARC).

The afternoon of day 1 was spent on presentations of the national and international climate policy stakes from country perspectives. Six broad policy issues emerged:

1. The consistency of national and global mitigation commitments and policy action,
2. The political economy of decarbonisation: stranded assets, oil & gas market impacts, etc.
3. Financing decarbonisation: attached investment demand and potential supply sources,
4. Labour market consequences and distributive impacts across household groups,
5. The contribution of non-CO₂ gases and the policy action on underlying sectors,
6. The “revenge of geography” or the inadequacy of “point” representations of economies.

At the end of day 1 the roundtable on the consecutive modelling agenda was cancelled to accommodate the accumulated delay. However, the discussions that inspired the above list implicitly produced an overview of current modelling shortcomings—although it must be stressed that some points of the list are already addressed in some IMACLIM versions, at various degrees of refinement.

The morning of day 2 was devoted to an overview of the stages of development of country versions. France and Brazil versions benefit from anteriority of efforts: IMACLIM already exists in different versions for both countries; includes household groups disaggregation in some of them; has been applied to several scenario analysis studies; is the object of continuing methodological developments

¹ The presentations of all contributors were collected during the workshop and distributed to the attendance at its close. That material is available upon request.

including via sensitivity analysis on paramount issues as the labour cost/international trade interactions. IMACLIM South Africa has version 1 running and the object of a thorough analysis in the framework of a concluding PhD thesis, including some new developments on the differentiation of labour by skill levels. Saudi Arabia and India have completed the data hybridisation step and are close to complete macroeconomic analysis by 2-sector “KLEM” versions. Last but not least, the effort on China at Tsinghua University is at the last stages of the data treatment effort, which extends to household disaggregation.

The afternoon of day 2 was dedicated to 3 technical sessions of the 4 initially planned—the session on hybridisation was dropped to allow catching up on the agenda.² In reshuffled order, the first session focused on code management issues and the possibility to have all country models run one single code posted online on the GitHub software development platform. The second session introduced a multiregional coupling of KLEM country/regional models as an architecture that could be used to bring into consistency national and global scenarios—leaving unanswered the important question of how the global IMACLIM-R (which has India, China and Brazil singularised, as well as the paramount advantage of cutting-edge international fossil markets) could contribute to the architecture. The third and last technical question focused on a Scenario Template that could be systematically used to report the Network’s modelling results, thereby enhancing their control and visibility.

Agreed upon next steps

- Redaction and approval of an **IMACLIM Charter** that would stress the particulars of the IMACLIM approach, which form the commonality of views on which the Network builds. CIRED to circulate draft.
- An **IMACLIM Network website**, with links from/to Network members websites. CIRED to circulate website skeleton for discussion.
- CIRED to upload **shared IMACLIM code on GitHub**, and to draft **Guidelines regarding code use**.
- One technical discussion on the **treatment of traditional biomass** at the hybridisation stage, to be organised via e-mail between India, Brazil, Russia and France. IIMA to summarise its take on the issue and to circulate it.
- All members to keep watch of options for **Network’s financing** both at national and international levels, and to signal relevant prospects to the Network.
- **Annual Network Meetings** to be held at Members’ institutions on a rotative basis. Expressions of interest to host the 2018 meeting are welcome.

² The session on KLEM offered an arguably useful synthesis of a simplified version of the hybridisation methodology focused on ‘downstream’ consistency with the coupled BU model (rather than on ‘upstream’ consistency of national accounts and energy data). The purpose of the hybridisation was however to focus on the more thorny issues of the ‘upstream’ hybridisation methodology. It will have to wait another meeting.

Participants

AL MUTAIRI Hossa	KAPSARC	Saudi Arabia	hossa.mutairi@kapsarc.org
CASSEN Christophe	CIREC	France	cassen@centre-cired.fr
GHERSI Frédéric	CIREC	France	ghersi@centre-cired.fr
GROTTERA Carolina	UFRJ	Brazil	carolinagrottera@gmail.com
GUIVARCH Céline	CIREC	France	guivarch@centre-cired.fr
GUPTA Dipti	IIMA	India	diptig@iima.ac.in
HAMDI-CHÉRIF Mériem	CIREC	France	hcmeriem@centre-cired.fr
HOURCADE Jean-Charles	CIREC	France	hourcade@centre-cired.fr
LA ROVERE Emilio	UFRJ	Brazil	emilio@ppe.ufrj.br
LECOQC Franck	CIREC	France	lecocq@centre-cired.fr
LEFÈVRE Julien	CIREC	France	jlefevre@centre-cired.fr
LE TREUT Gaëlle	CIREC	France	letreut@centre-cired.fr
MARQUARD Andrew	UCT	South Africa	andrew.marquard@uct.ac.za
Ó GALLACHÓIR Brian	UCC	Ireland	b.ogallachoir@ucc.ie
SAFONOV Georgy	HSE	Moscow	gsafonov@hse.ru
SCHERS Jules	CIREC	France	schers@centre-cired.fr
SOUMMANE Salaheddine	EDF R&D	France	salaheddine.soummame@edf.fr
TENG Fei	Tsinghua U.	China	tengfei@tsinghua.edu.cn
XI Yang	CUP	China	yangxi@cup.edu.cn