

TAC Meeting

2 November 2021

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TAC Voting Members New members in **bold**

Full Name	Account Name	Appointed By	
Boris DOLLEY	RTE (Reseau de Transport dElectricite)	Vote of TSC Committee - OperatorFabric	
Anne Tilloy	RTE (Reseau de Transport dElectricite)	Vote of TSC Committee - PowSyBI	
Carmen Best	Recurve	Vote of TSC Committee - OpenEEmeter	
Arjan Stam	Alliander	Membership Entitlement	
Jonas van den Bogaard	Alliander	Vote of TSC Committee - GXF	
Benoît Jeanson	RTE (Reseau de Transport dElectricite)	Membership Entitlement	
Antonello Monti	RWTH Aachen University	Vote of TSC Committee - SOGNO	



LF Energy Hosted Project Leads Changes in **bold**

Project	Project Lead(s)
PowSyBI	Anne Tilloy, RTE
OperatorFabric	Boris Dolley, RTE
OpenEEmeter	Carmen Best, Recurve
GXF	Jonas van den Bogaard, Alliander
SOGNO	Antonello Monti, RWTH Aachen University
EM2	none
Compas	Frederic Fouseret, RTE
FledgePOWER	Akli Rahmoun, RTE
Hyphae	Kotaro Jinushi, Sony ESL
openLEADR	Lonneke Driessen & Stan Janssen, OpenADR
SEAPATH	Eloi Bail, Savoir-faire Linux
Grid Capacity Map	none
Shapeshifter	Jelle Wijnja, Alliander
OpenSTF	Frank Kreuwel, Alliander
EVerest	none
Green Energy Hub	none



Agenda

Opening (15 Minutes)

- Summary of last TAC meeting & Updates from the Board Meeting
- Upcoming community meetings of interest
- Landscape updates
- TAC Sponsors for projects

TAC Business (50 Minutes)

FlexMeasures project proposal

Outreach updates (10 Minutes)

Closing and next meeting (5 Minutes)



Summary of last TAC meeting

 Meeting notes and deck at <u>https://wiki.lfenergy.org/display/HOME/Technical+Advisory+Council#</u>
 <u>TechnicalAdvisoryCouncil-MeetingMinutes</u>

Updates from the Board



Upcoming community meetings of interest

- If interested in participating in Security WG meetings, please joining the mailing list at https://lists.lfenergy.org/g/security
- CI/CD working group meeting when to schedule next meeting?
 - Details of work so far at https://wiki.lfenergy.org/pages/viewpage.action?pageId=18311586
 - Mailing list at https://lists.lfenergy.org/g/cicd with meeting invites.
- Please share others!



TAC Sponsors for projects

As part of the benefit for LF Energy projects, the TAC has a sponsor for each project.

"Appointment of an existing TAC member by the TAC that will act as a sponsor of the project and provide recommendations regarding governance best practices."

ASK: Volunteer to be a TAC sponsor for a project

Project	Current Level	TAC Sponsor
Compas	Incubation	
EVerest	Sandbox	
FledgePOWER	Incubation	
Green Data Hub	Incubation	
Grid Capacity Map	Incubation	
GXF	Early Adoption	
Hyphae	Incubation	
OpenEEmeter	Incubation	
OpenLEADR	Incubation	
OpenSTF	Incubation	
OperatorFabric	Early Adoption	
PowSyBI	Early Adoption	
SEAPATH	Incubation	
Shapeshifter	Incubation	
SOGNO	Early Adoption	



Special Interest Groups/Working Group plan

Currently tracking 17 Special Interest Groups and/or Working Groups. See attached Exhibit A with the current list.

Proposed actions:

- Assess which groups are still active; archive previous groups.
- Identify leader(s) for each active group.
- Work with each group to establish a charter outlining...
 - Purpose
 - Goals
 - Non-goals
 - Deliverables
- Ensure each group has collaboration infrastructure, including...
 - Mailing list
 - Calendar
 - Wiki space for meeting notes
 - Zoom account access
- Add groups to the annual review schedule



Landscape now with more project info!

We are using the LF Energy Landscape to showcase more project information:

- Mailing List/Slack Channel
- LFX Insights
- SBOM
- Wiki
- TSC Meeting Notes
- Calendar
- Contribution Guidelines

ACTION: Project leads please review your entry and ensure it is accurate; issue PR for any changes needed.



	more total: ♠\$52			
Crunchbase	crunchbase.com/organization/lf-energy			
LinkedIn	linkedin.com/company/lf-energy			
Twitter	@LFE_Foundation Latest Tweet this wee			
First Commit	5 years ago	Latest Commit	3 weeks ago	
Contributors	35	Headcount	1-10	
Headquarters	San Francisco, California			
Mailing List	https://lists.lfenergy.org/g/sogr	no-discussion		
Slack Channel	#sogno			
LFX Insights	https://insights.lfx.linuxfoundation.org/projects/lfenergy%2Fsogno			
Wiki Page	https://wiki.lfenergy.org/display/HOME/SOGNO			
SBOM	https://github.com/lfscanning/spdx-lfenergy/tree/main/sogno			
TSC Meeting Notes	https://github.com/sogno-platform/tsc/tree/master/tsc/meetings			
Calendar	https://lists.lfenergy.org/g/sogno-tsc/calendar			
Contribution Guidelines	https://github.com/sogno-platform/tsc/blob/master/CONTRIBUTING.md			



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Opening (5 Minutes)

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TAC Business (40 Minutes)

FlexMeasures project proposal

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FlexMeasures project proposal



FlexMeasures

Rapid & scalable energy flexibility services for/by ESCOs

LF Energy TAC meeting, 2 Nov 2021



"**Flexibility** is the grid's ability to manage variability and volatility to <u>balance</u> supply and demand."

ACCENTURE

"Demand **flexibility** uses communication and control technology to <u>shift</u> electricity use across hours of the day."

ROCKY MOUNTAINS INSTITUTE



energy flex specialists



asset owners & operators



Scaling is hard!

ESCOs are the bridges we need!

asset owners & operators

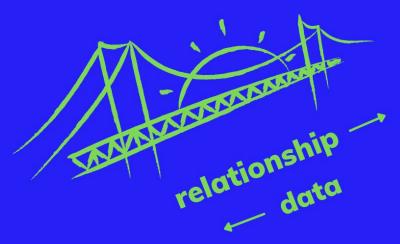






energy flex specialists





Our customers: Energy Service Companies (ESCOs)

Market size: USD 29 billion, growing 8% / year

Examples:

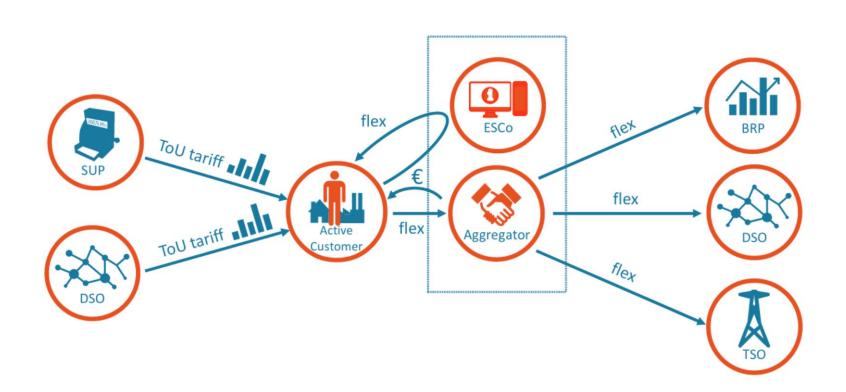
Metering companies, real estate developers, microgrid developers, car charging station operators, business parks, energy cooperatives ...

ESCos & implicit distributed flexibility





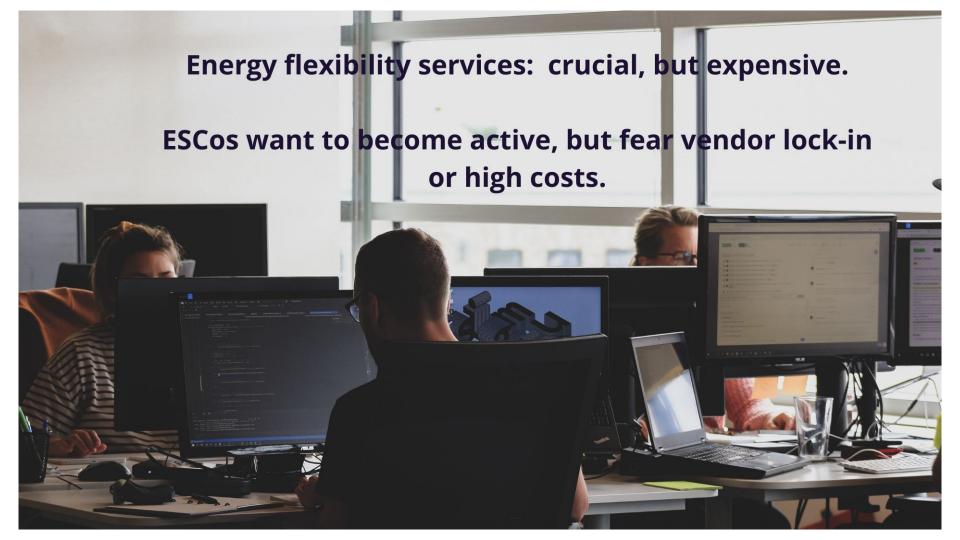
ESCos & explicit distributed flexibility



Many services?

The needs in energy flexibility service implementation change with:

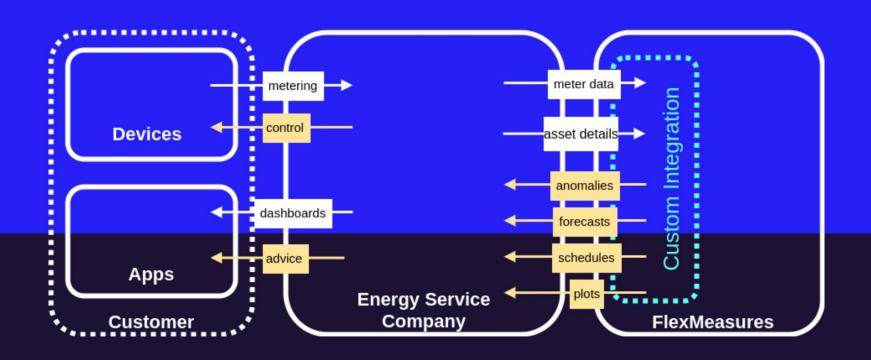
- type of use
- type of customer
- sector
- connection/grid
- markets
- storage?
- culture!
- etc.



FlexMeasures: Design goal

Build real-time energy flexibility services, *rapidly* and *scalable*.

On top of open source.



How we use FlexMeasures as a middleware.

Energy Flexibility Services GripOnGas

Track avoidable gas consumption

E-Mission

Reduce CO2 footprint of processes

V2G@Home

EV charging living lab

BVP

Balance portfolios

Platform Middleware **FlexMeasures**

ML models, API, security, plugin support, multi-tenancy, plotting, developer docs ...

Data integrations

Metering Companies

Weather Services

Markets

FlexMeasures in the LFE context

New target group:

Possible integrations:

ESCos

- OpenLEADR
- ShapeShifter
- OpenEEMeter

Resources

- https://github.com/SeitaBV/flexmeasures/
- https://flexmeasures.readthedocs.io
- https://flexmeasures.io
- https://seita.nl/core-technology/flexmeasures/
- https://seita.nl/services/

Project Review Cycle

Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
OpenEEmeter	Incubation	June 4, 2019		October 12, 2021
EM2	Early Adoption	June 4, 2019		October 12, 2021
GXF	Early Adoption	February 4, 2020		October 12, 2021
SEAPATH	Incubation	October 6, 2020		November 23, 2021
OpenLEADR	Incubation	September 15, 2020		November 23, 2021
Hyphae	Incubation	December 8, 2020		December 14, 2021
FledgePOWER	Incubation	February 11, 2021		February 15, 2022
SOGNO	Early Adoption	October 27, 2020	March 16, 2021	March 8, 2022
Shapeshifter	Incubation	April 6, 2021		March 29, 2022
Grid Capacity Map	Incubation	April 27, 2021		April 19, 2022
OperatorFabric	Early Adoption	April 30, 2019	July 20, 2021	July 12, 2022
Compas	Incubation	May 5, 2020	June 29, 2021	July 12, 2022
PowSyBI	Early Adoption	April 30, 2019	August 31, 2021	August 23, 2022
OpenSTF	Incubation	September 21, 2021		September 13, 2022
EVerest	Sandbox	October 12, 2021		November 15, 2022
Green Data Hub	Incubation	October 12, 2021		October 25, 2022



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Outreach Updates

- LF Energy Webinar Series
- TFiR videos
- Recent press articles
- Upcoming events



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Next TAC Meeting

The next meeting of the LF Energy TAC is scheduled for 23 November 2021 at 8:00 am US Pacific Time/11:00 am US Eastern Time/5:00 pm Central European Time.

Agenda will include:

- Recap of last TAC meeting/Governing Board updates
- SEAPATH annual review
- OpenLEADR annual review





Thank you!