

SISTEMA DE MONITORAMENTO DA PRODUÇÃO DE PETRÓLEO



Innovation
on Time,
on Budget,
and on Value.

Valor

QUAL O VALOR DE:

- ✓ Saber se os seus poços estão produzindo?
- ✓ Não ter que visitar os poços todos os dias?
- ✓ Saber se houve queda de energia (ou de uma das fases) e quando ela é reestabelecida?
- ✓ Saber se uma das fases elétricas caiu (pode danificar o motor)?
- ✓ Receber alertas de sobrecarga ou subcarga?
- ✓ Conhecer o comportamento do motor?



Ganhos

Gerenciamento de baixo custo Baseado em IoT Para produtores independentes *onshore*

- ✓ Projetos sob medida para campos e instalações marginais.
- ✓ Melhor gerenciamento e VPL.
- ✓ Redução do tempo de implementação.
- ✓ Redução de risco e de custos.
- ✓ Maior confiabilidade.
- ✓ Apoio no atendimento de demandas regulatórias (PAP – ANP).



Aplicações

1. Áreas de produção (poços)

- ✓ Unidades de Bombeio Mecânico (UBM)
- ✓ Bomba Centrífuga Submersa (BCS)
- ✓ Bomba de Cavidade Progressiva (BCP)
- ✓ Poços de Injeção

2. Instalações de processamento

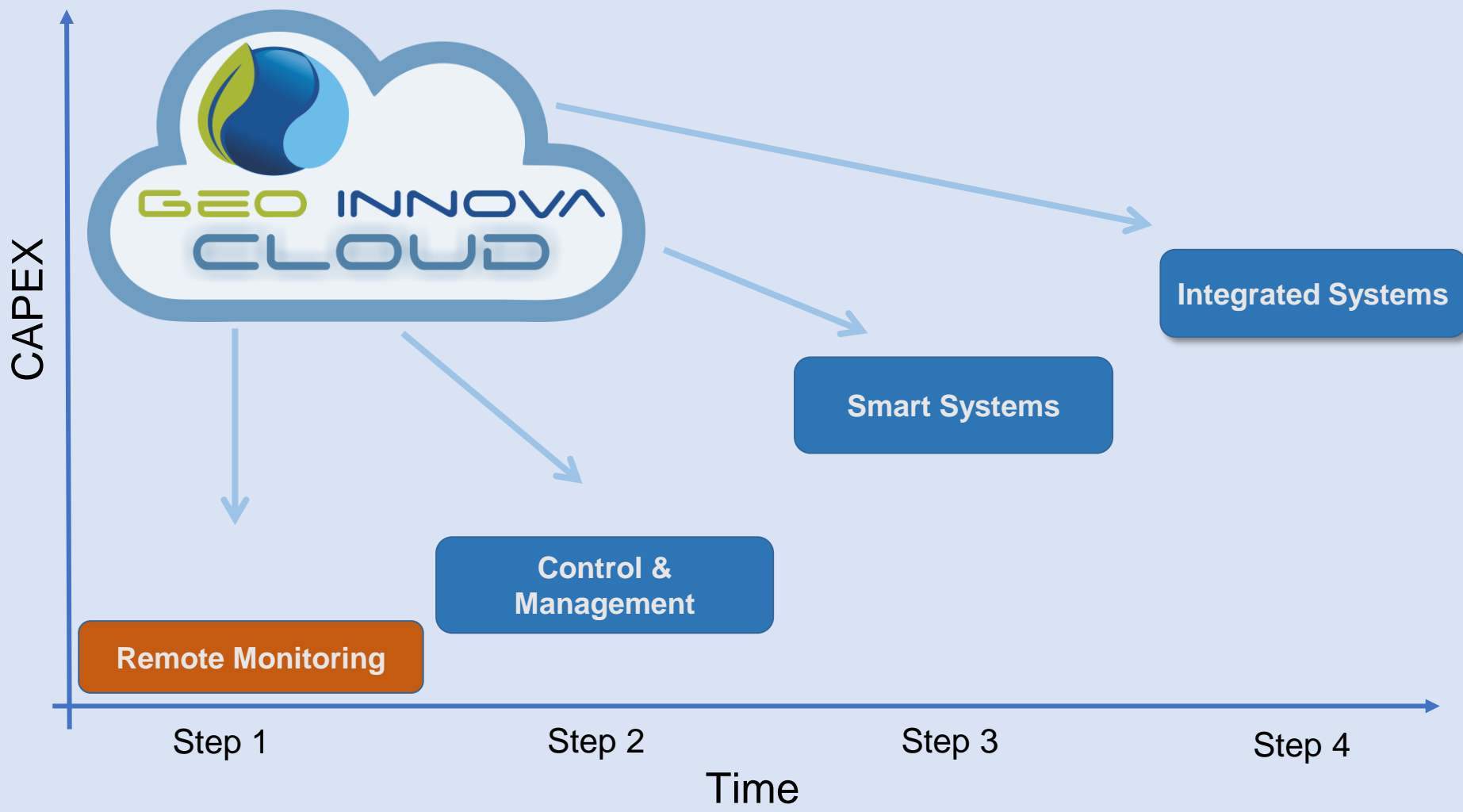
- ✓ Monitoramento de tanques de óleo tratado
- ✓ Monitoramento de oleodutos/gasodutos
- ✓ Acionamentos remotos (válvulas, terminais, etc.)

3. Outros projetos sob medida





Implementação x Custos (Estratégia)



Ecosystem & Interfaces



Phases Acquisition Communication Aggregation Analysis Action

Geo Innova Device Hardware and Software

- Installs sensors
- Defines rate of acquisition
- Defines local reading and actuation
- Communicates with network
- Transfer data to cloud
- Shutdown pump

Geo Innova Cloud Platform

- Manages, stores, aggregates data
- Create data APIs
- Defines alert rules, action plan, reports
- Generates indicators, alerts and reports
- Manages data & terms
- Defines ERP integration
- Predictive analytics

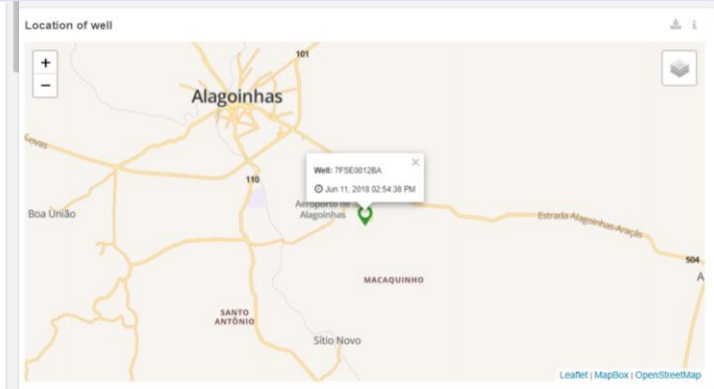
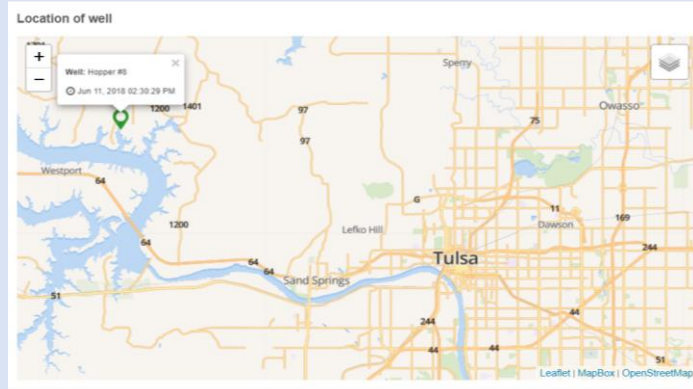
Geo Innova Cloud Applications

- Data visual on Dashboard
- Display alerts
- Trend reports
- Display control apps

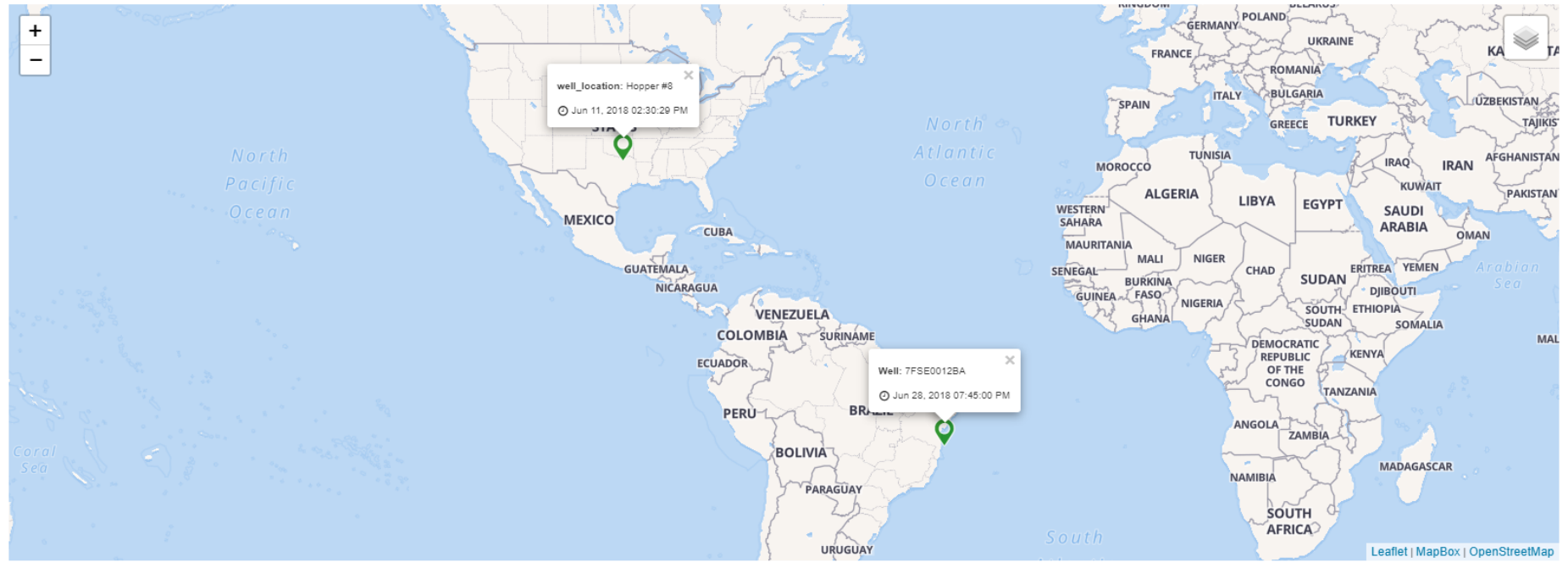




Dashboard



Location of wells





Dashboard



➤ Localização e Informações do Operador (Campo e Poço)

Device

Bucket

</> Analysis

⚡ Action

📍 Explore


📊 Dashboards

Geoinnova

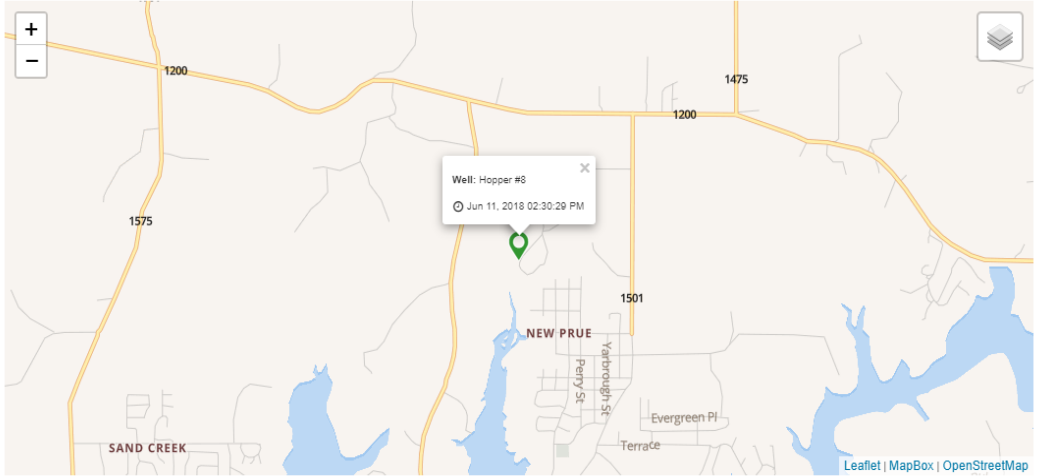
- Nova Petróleo
- Revard O&G
 - General
 - Settings
- Geoinnova - Management
 - All wells

Community | Documentation
Realtime: connected
Admin: 3.17 API: 4.1.4

General



Location of well



Well: Hopper #8
Jun 11, 2018 02:30:29 PM

Leaflet | MapBox | OpenStreetMap

Operator Information

Operator	Well number	County	Field
Revard O&G	Hopper #8	Osage County	Osage County

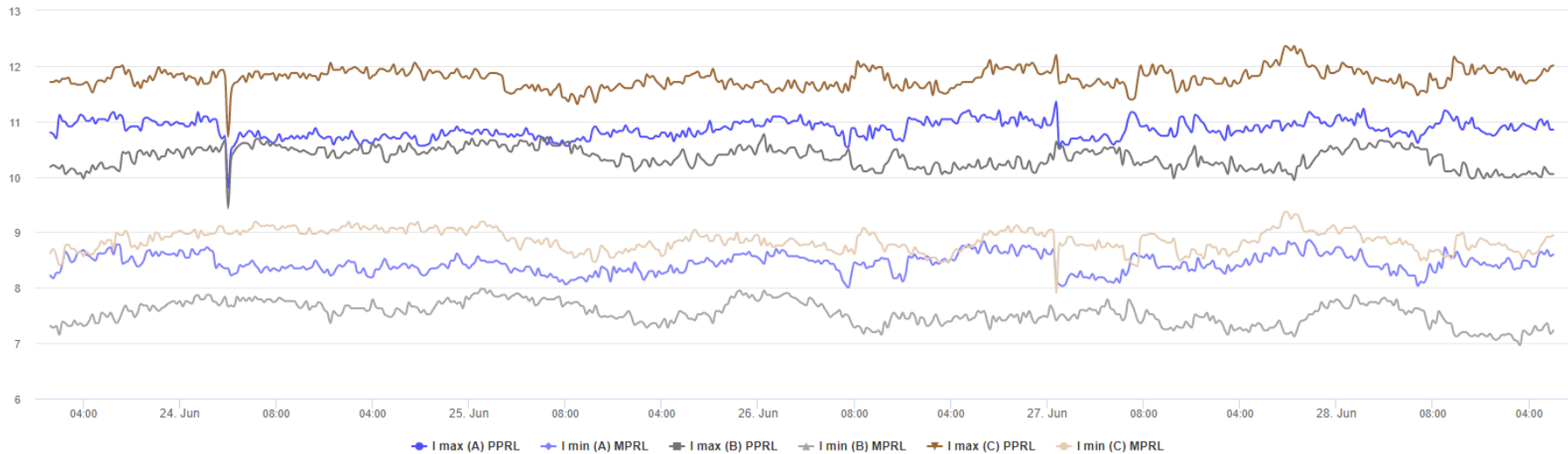


Dashboard



➤ MPRL & PPRL

Peak and Minimum Currents - amps (A)



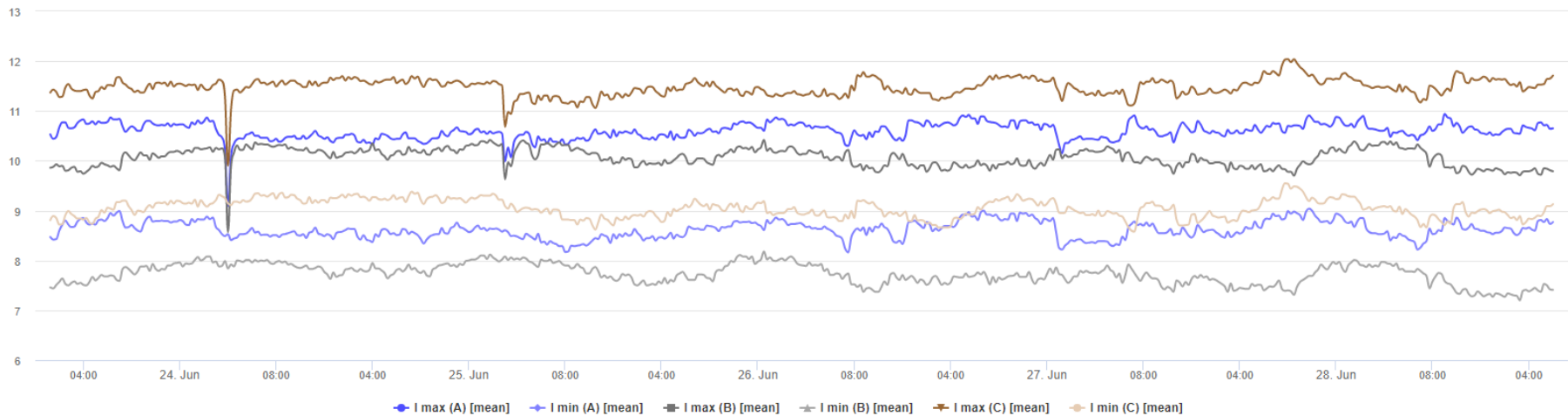
Maximum and Minimum Currents - amps (A)

I max A (PPRL)	I min A (MPRL)	I max B (PPRL)	I min B (MPRL)	I max C (PPRL)	I min C (MPRL)	Date and Time
10.85	8.60	10.05	7.23	12.01	8.95	06/28/2018 6:00:00 pm
10.85	8.57	10.05	7.17	11.98	8.92	06/28/2018 5:45:00 pm
11.01	8.68	10.10	7.36	11.90	8.92	06/28/2018 5:30:00 pm
10.93	8.60	10.18	7.31	11.95	8.84	06/28/2018 5:15:00 pm
11.04	8.65	9.99	7.23	11.85	8.76	06/28/2018 5:00:00 pm



➤ Média das correntes ao longo do tempo

Average Behavior of Phases - amps (A)



Average Behavior of Phases - amps (A)

I max (A) [mean]	I min (A) [mean]	I max (B) [mean]	I min (B) [mean]	I max (C) [mean]	I min (C) [mean]	Date and Time
10.65	8.77	9.79	7.41	11.71	9.13	06/28/2018 6:00:00 pm
10.64	8.73	9.81	7.42	11.65	9.09	06/28/2018 5:45:00 pm
10.72	8.83	9.84	7.50	11.64	9.09	06/28/2018 5:30:00 pm
10.71	8.77	9.85	7.53	11.54	8.97	06/28/2018 5:15:00 pm
10.77	8.81	9.72	7.37	11.53	8.89	06/28/2018 5:00:00 pm



Dashboard



➤ SPM, Previsão do tempo e Cotação do Barril



Oil Brent Price

Last Refreshed Brent Prices	Open	High	Low	Settle	Change
03 July 2018, 02:28:49 am	\$ 78.55	\$ 78.95	\$ 77.16	\$ 77.3	\$ -1.93

Oil West Texas Price

Last Refreshed West Texas Prices	Open	High	Low	Settle	Change
03 July 2018, 02:28:52 am	\$ 73.82	\$ 74.35	\$ 72.51	\$ 73.99	\$ 0.21

Forecast for today and the next day

Day	Condition	Max Temp (°F)	Min Temp (°F)	Humidity (%)	Date and Time
Tuesday 03/07	Clear	98	75	66	07/03/2018 3:08:50 pm
Wednesday 04/07	Partly Cloudy	93	74	66	07/03/2018 3:08:50 pm

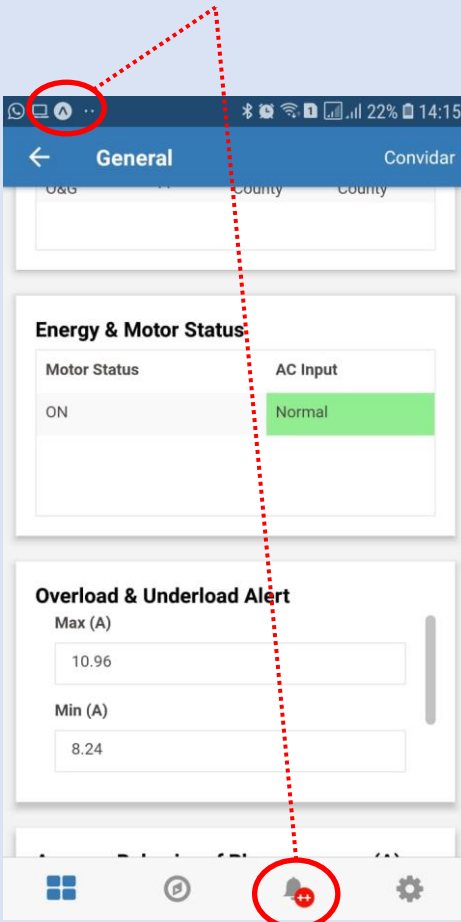
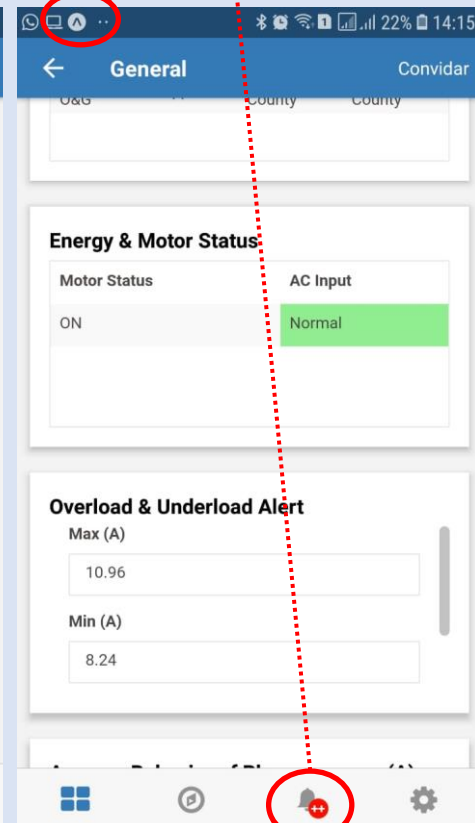
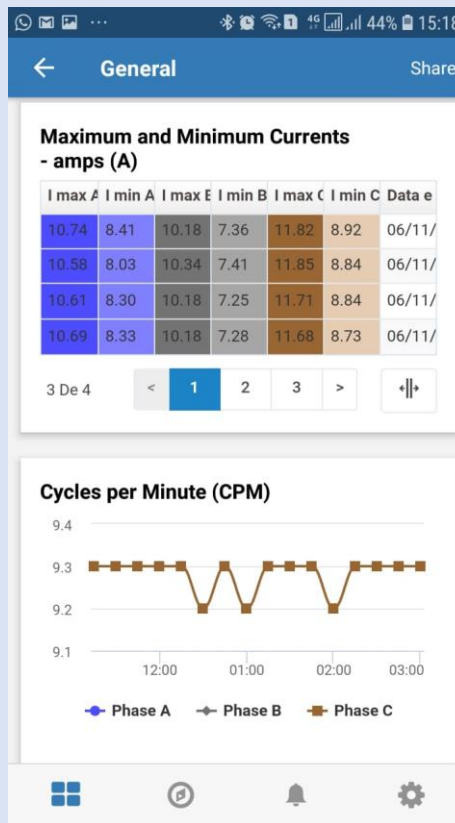
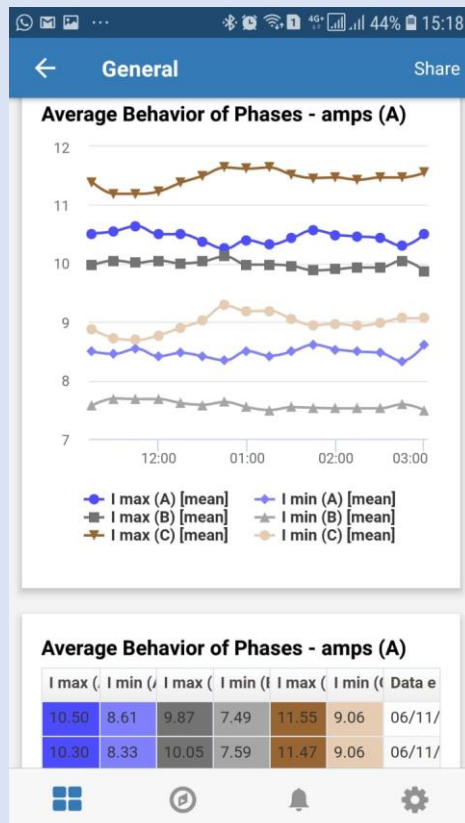
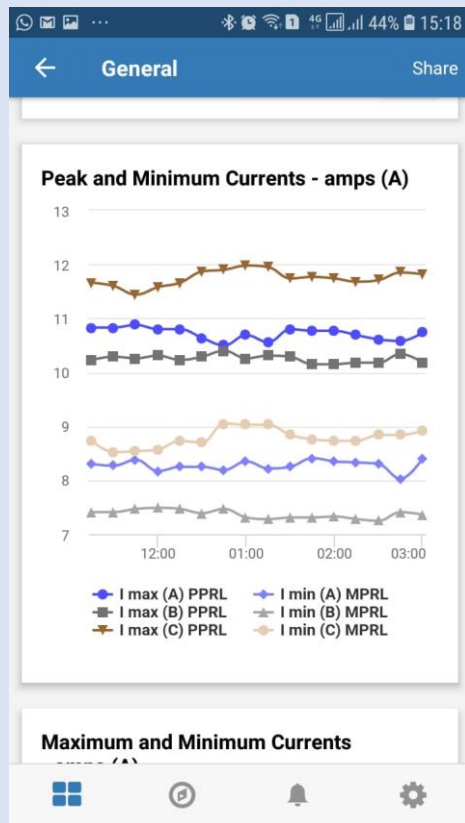


Dashboard

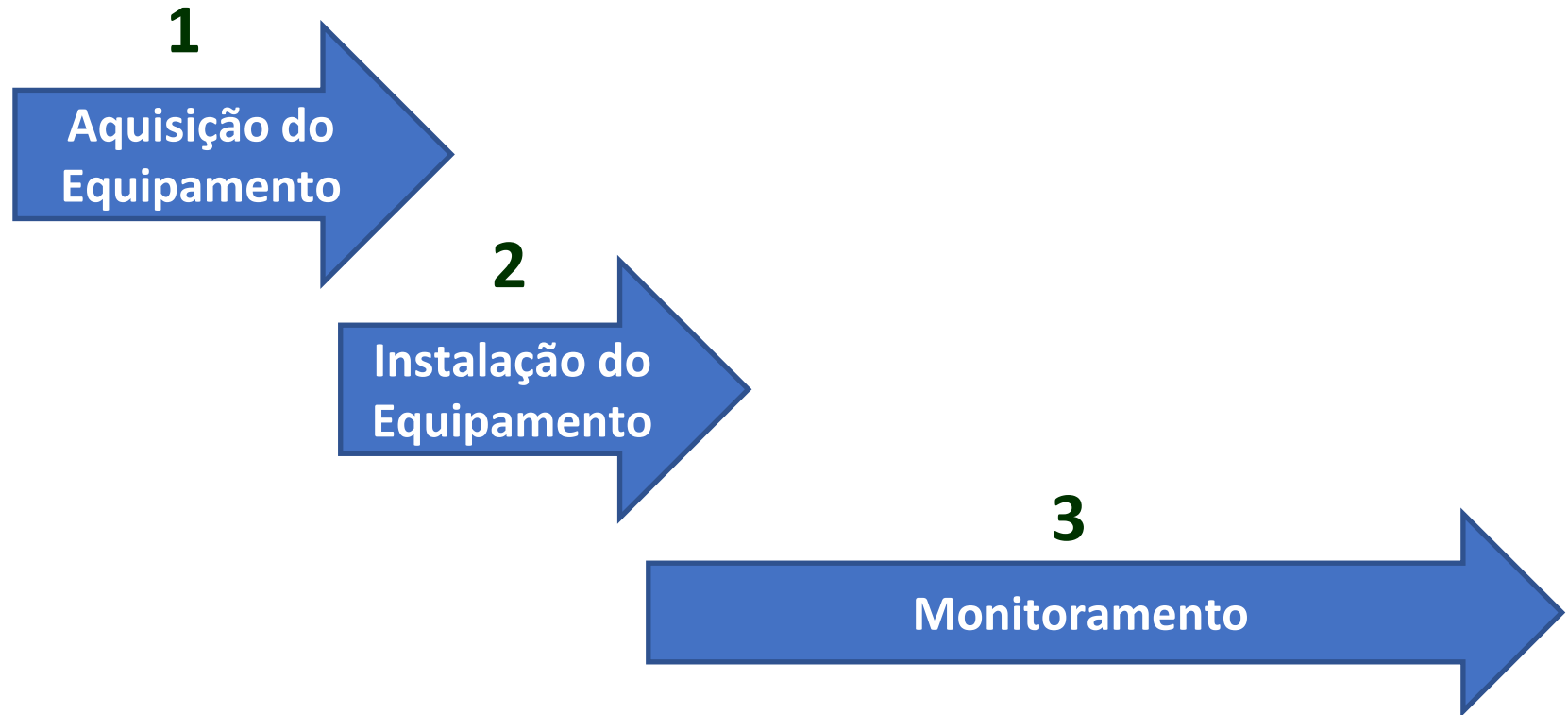


➤ Aplicativo (iOS e Android)

Alertas



Investimento



Mensalidades a partir de \$ 250.00 USD

Inovação no tempo, no orçamento e no VALOR





GEO INNOVA

Tech-based startup

Offices

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