



# Low Cost High Tech Optimization Solutions

PAULO LOPES, CEO



## Optimizing Drilling - Optimizing Production - Maximizing Cash Flow

- ▶ Petro Innova Tech é uma startup de base tecnológica com o objetivo de criar soluções inteligentes em ambiente de nuvem, com fácil acesso e uso amigável para a indústria de petróleo.
- ▶ Soluções de baixo CAPEX e baixo OPEX tailor-made para pequenos produtores.





## Optimizing Drilling - Optimizing Production - Maximizing Cash Flow

### Our Model

- ▶ Nosso modelo é baseado no conhecimento profundo de: (1) desafios atuais e futuros do setor; (2) tecnologias convencionais e emergentes; (3) Mercado de Petróleo; (4) Econometria e Análise de Tomada de Decisão; e (5) engenharia de *software*.

### Technologies

- ▶ Petro Innova Tech desenvolve tecnologias de otimização em várias fases do processo de exploração, desenvolvimento e produção de petróleo e gás.
- ▶ Transformamos anos de experiência no campo, em soluções envelopadas em *software*, com embarque das mais recentes tecnologias de Internet das Coisas Industriais (IIoT) e de infraestrutura computacional em nuvem, resultando em tomada de decisão inteligente, redução de riscos, confiabilidade e otimização de NPV.



## Optimizing Drilling - Optimizing Production - Maximizing Cash Flow

### Products

- ▶ Os produtos da Petro Innova Tech são originalmente desenvolvidos como ferramentas de suporte para serviços especializados. Tais serviços foram então “envelopados” como ferramentas computacionais em ambiente de nuvem, embarcando novas tecnologias e aplicativos.

### Worldwide scenario

- ▶ **OTIMIZAÇÃO** da produção.
- ▶ Empresas buscando soluções para redução de risco e custo.

### Main product

- **Otimizador de produção para poços de petróleo**

**PETRO**  
Innova  
Tech



- **Otimizador de produção para poços de petróleo**

## ▶ **Objetivo:**

- ▶ Otimização de operações onshore, inclusive para pequenos produtores.

## ▶ **Propriedades:**

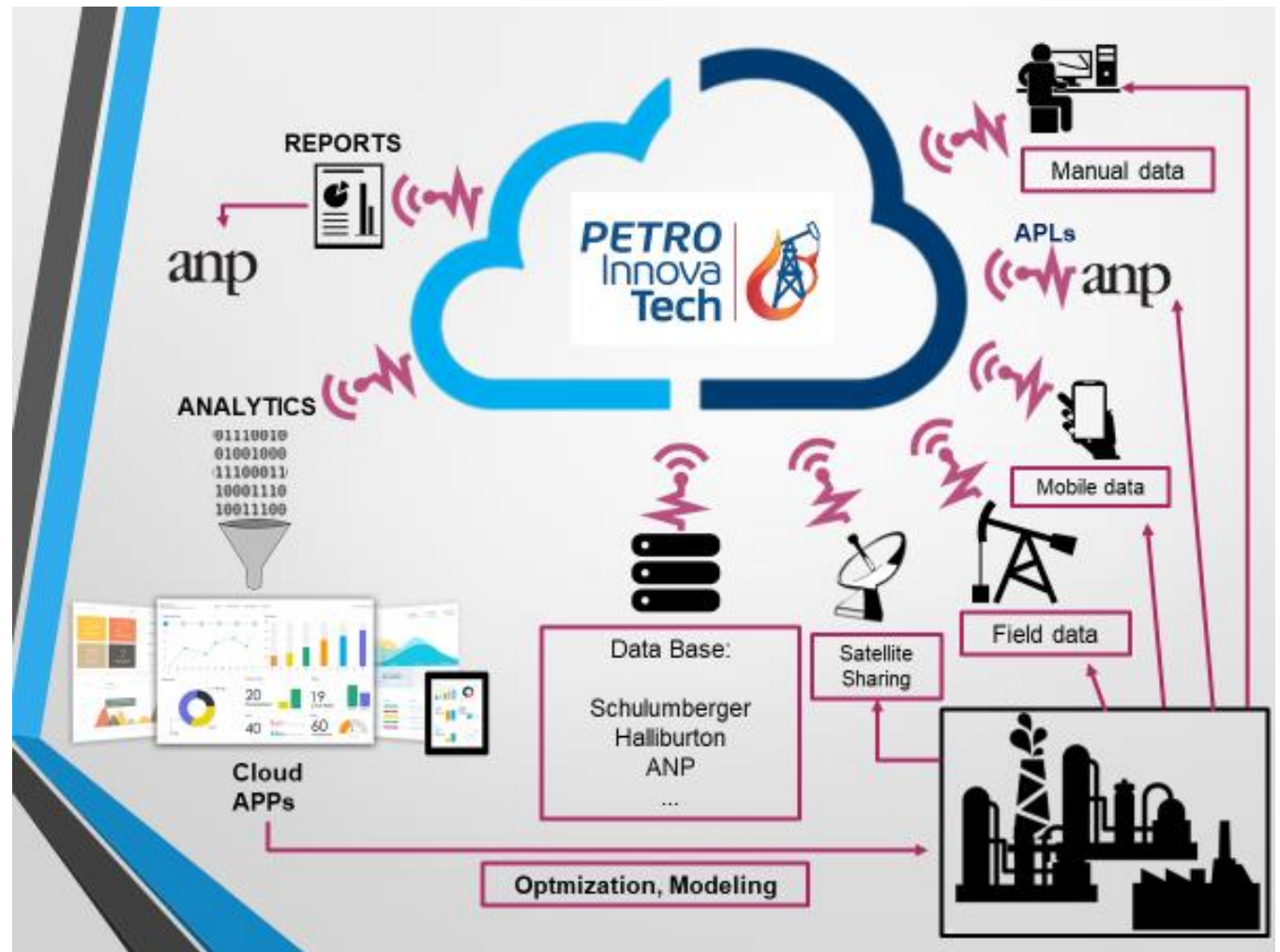
- ▶ Plataforma tecnológica de fácil utilização e segura,
- ▶ Integrada com o sistema em nuvem,
- ▶ Pode ser acionada em computador ou smartphone,
- ▶ Proporciona soluções tecnológicas para melhoria de produtividade,
- ▶ Aumento do volume de produção de hidrocarbonetos, otimizando operações onshore,
- ▶ Maximização de cashflow.



**PETRO**  
Innova  
Tech



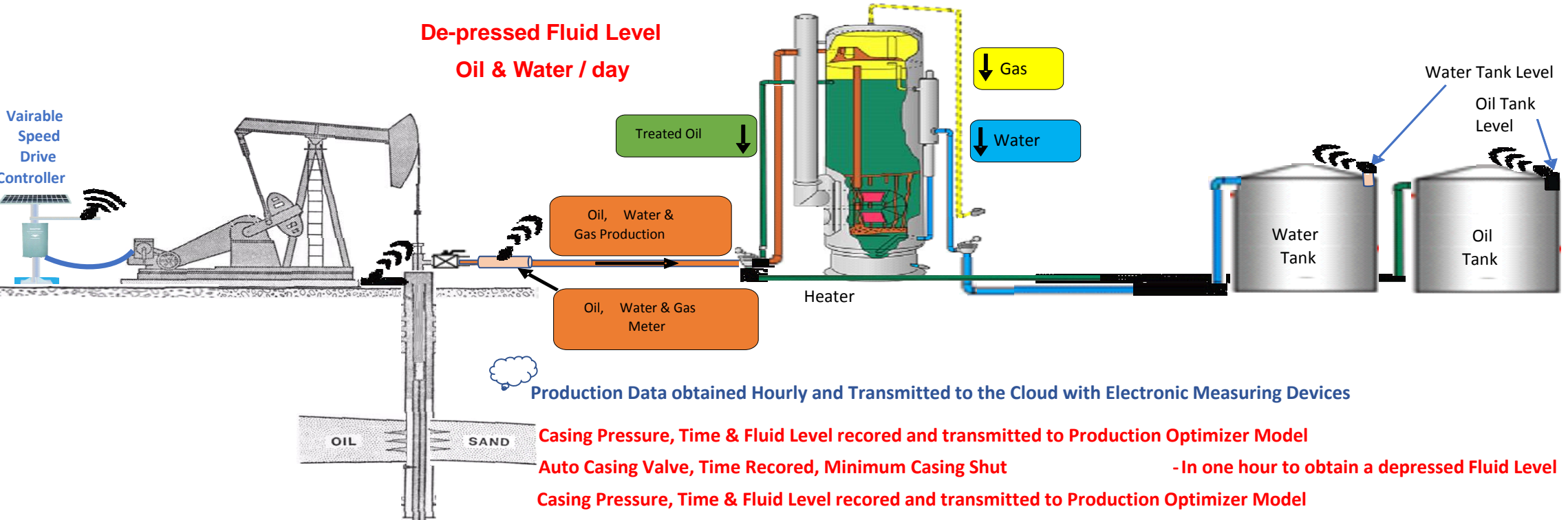
- Otimizador de produção para poços de petróleo



**CONVENTIONAL ROD PUMP**



Production Optimizer Model resides in the Cloud



Production Data obtained Hourly and Transmitted to the Cloud with Electronic Measuring Devices

- Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model
- Auto Casing Valve, Time Recored, Minimum Casing Shut - In one hour to obtain a depressed Fluid Level
- Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model
- Oil, Water and Gas production measured hourly and transmitted to Production Optimizer Model
- Collected data is processed, instructions are transmitted to Vairable Speed Controller to Increase or Decrease Pumping Unit motor to maintain well optimization



Production Data obtained Manually, Production Engineer accesses Production Optimizer Model Residing in the Cloud

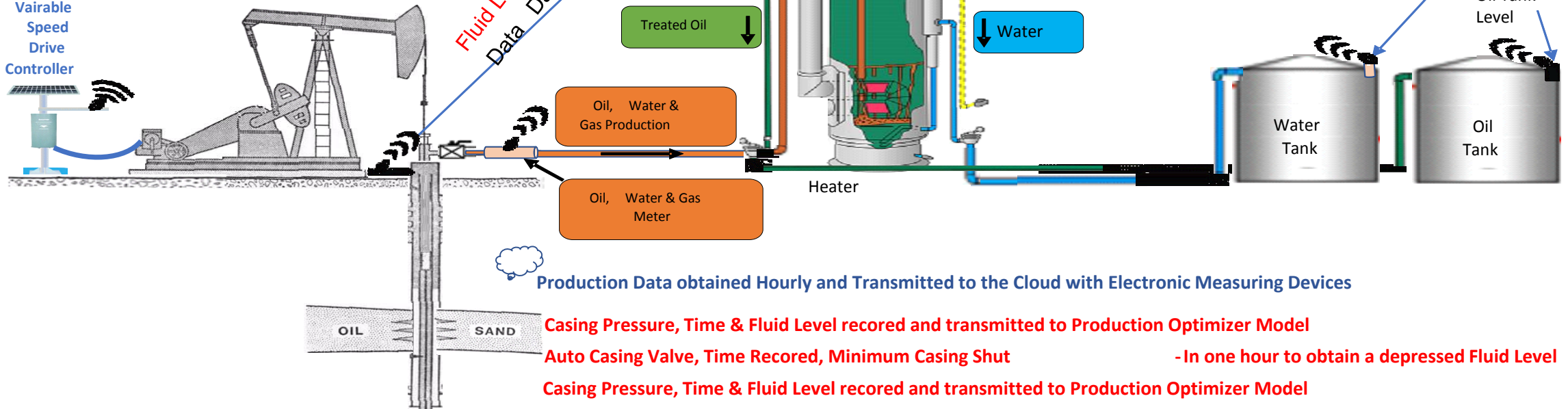
Casing Pressure, Time & Fluid Level recored then Casing valve closed for one hour, Casing Pressure, Time and Depressed Fluid Level recored and sent to Production Engineer. Engineer accesses Production Model in the Cloud and chooses best optimization motor speed.

**CONVENTIONAL ROD PUMP**



Production Optimizer Model resides in the Cloud

Vairable Speed Drive Controller



Production Data obtained Hourly and Transmitted to the Cloud with Electronic Measuring Devices

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Auto Casing Valve, Time Recored, Minimum Casing Shut

- In one hour to obtain a depressed Fluid Level

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Oil, Water and Gas production measured hourly and transmitted to Production Optimizer Model

Collected data is processed, instructions are transmitted to Vairable Speed Controller to Increase or Decrease Pumping Unit motor to maintain well optimization



Production Data obtained Manually, Production Engineer accesses Production Optimizer Model Residing in the Cloud

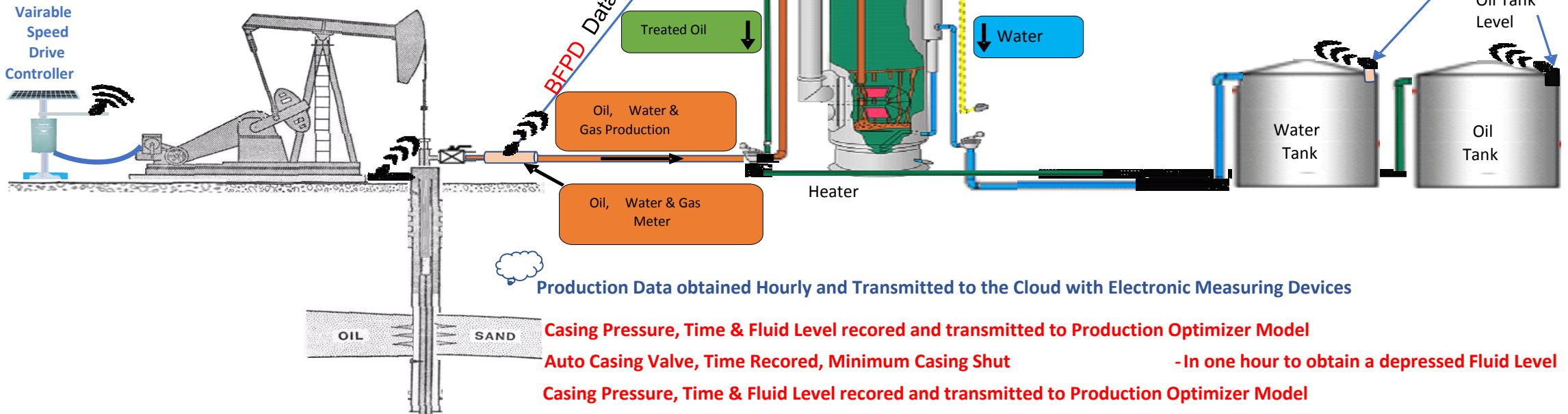
Casing Pressure, Time & Fluid Level recored then Casing valve closed for one hour, Casing Pressure, Time and Depressed Fluid Level recored and sent to Production Engineer. Engineer accesses Production Model in the Cloud and chooses best optimization motor speed.



**CONVENTIONAL ROD PUMP**



Production Optimizer Model resides in the Cloud



Production Data obtained Hourly and Transmitted to the Cloud with Electronic Measuring Devices

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Auto Casing Valve, Time Recored, Minimum Casing Shut

- In one hour to obtain a depressed Fluid Level

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Oil, Water and Gas production measured hourly and transmitted to Production Optimizer Model

Collected data is processed, instructions are transmitted to Vairable Speed Controller to Increase or Decrease Pumping Unit motor to maintain well optimization

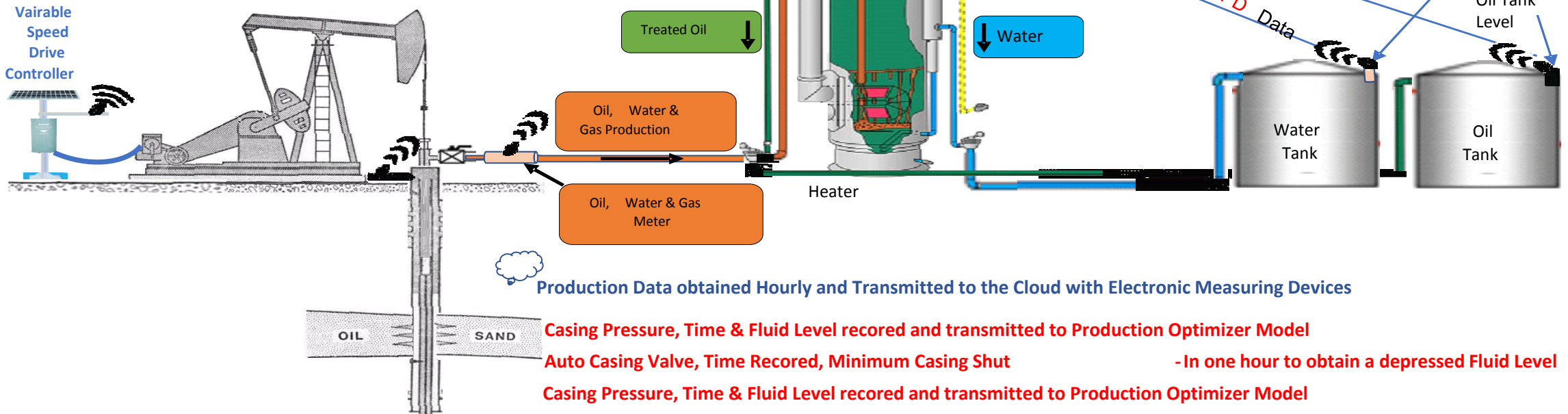
Production Data obtained Manually, Production Engineer accesses Production Optimizer Model Residing in the Cloud

Casing Pressure, Time & Fluid Level recored then Casing valve closed for one hour, Casing Pressure, Time and Depressed Fluid Level recored and sent to Production Engineer. Engineer accesses Production Model in the Cloud and chooses best optimization motor speed.

**CONVENTIONAL ROD PUMP**



Production Optimizer Model resides in the Cloud



Production Data obtained Hourly and Transmitted to the Cloud with Electronic Measuring Devices

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Auto Casing Valve, Time Recored, Minimum Casing Shut

- In one hour to obtain a depressed Fluid Level

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Oil, Water and Gas production measured hourly and transmitted to Production Optimizer Model

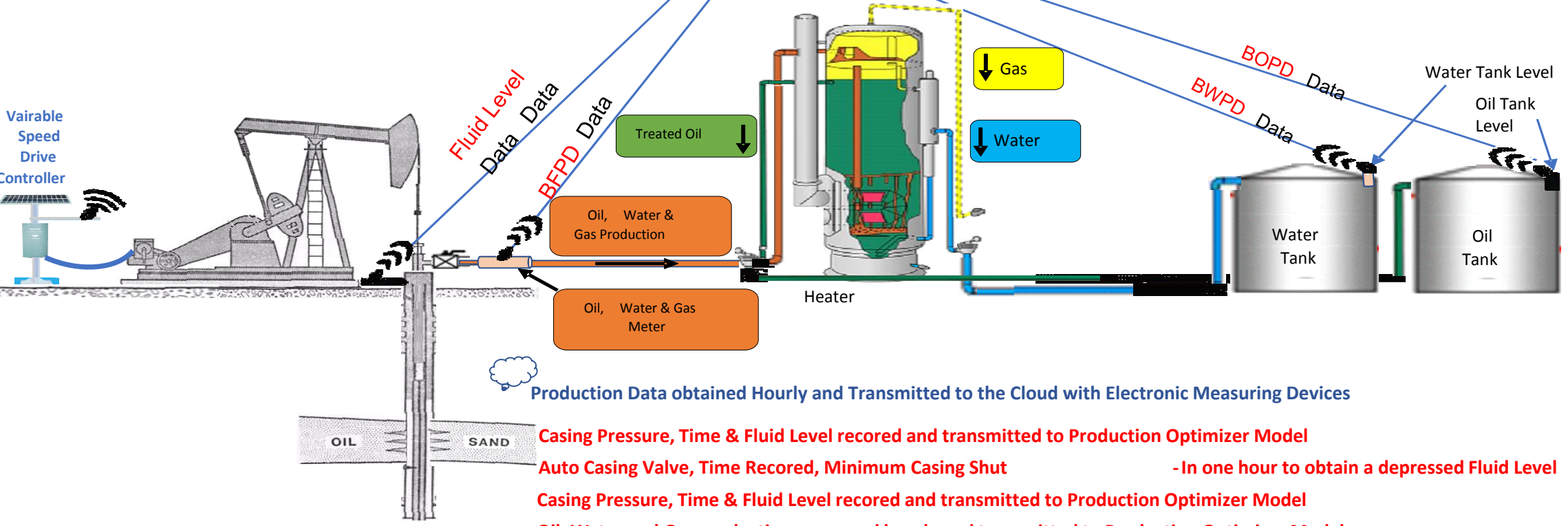
Collected data is processed, instructions are transmitted to Vairable Speed Controller to Increase or Decrease Pumping Unit motor to maintain well optimization



Production Data obtained Manually, Production Engineer accesses Production Optimizer Model Residing in the Cloud

Casing Pressure, Time & Fluid Level recored then Casing valve closed for one hour, Casing Pressure, Time and Depressed Fluid Level recored and sent to Production Engineer. Engineer accesses Production Model in the Cloud and chooses best optimization motor speed.

**CONVENTIONAL ROD PUMP**



Production Data obtained Hourly and Transmitted to the Cloud with Electronic Measuring Devices

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Auto Casing Valve, Time Recored, Minimum Casing Shut

- In one hour to obtain a depressed Fluid Level

Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model

Oil, Water and Gas production measured hourly and transmitted to Production Optimizer Model

Collected data is processed, instructions are transmitted to Vairable Speed Controller to Increase or Decrease Pumping Unit motor to maintain well optimization

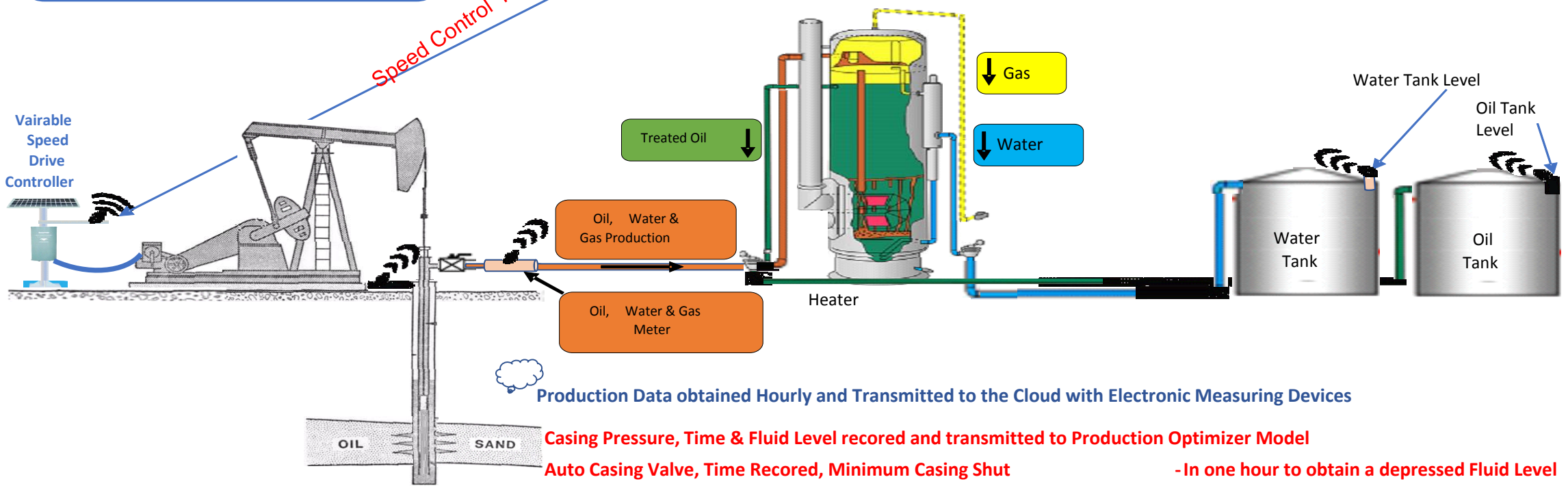
Production Data obtained Manually, Production Engineer accesses Production Optimizer Model Residing in the Cloud

Casing Pressure, Time & Fluid Level recored then Casing valve closed for one hour, Casing Pressure, Time and Depressed Fluid Level recored and sent to Production Engineer. Engineer accesses Production Model in the Cloud and chooses best optimization motor speed.

**CONVENTIONAL ROD PUMP**



Production Optimizer Model resides in the Cloud



Production Data obtained Hourly and Transmitted to the Cloud with Electronic Measuring Devices

- Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model
- Auto Casing Valve, Time Recored, Minimum Casing Shut - In one hour to obtain a depressed Fluid Level
- Casing Pressure, Time & Fluid Level recored and transmitted to Production Optimizer Model
- Oil, Water and Gas production measured hourly and transmitted to Production Optimizer Model
- Collected data is processed, instructions are transmitted to Vairable Speed Controller to Increase or Decrease Pumping Unit motor to maintain well optimization

Production Data obtained Manually, Production Engineer accesses Production Optimizer Model Residing in the Cloud

Casing Pressure, Time & Fluid Level recored then Casing valve closed for one hour, Casing Pressure, Time and Depressed Fluid Level recored and sent to Production Engineer. Engineer accesses Production Model in the Cloud and chooses best optimization motor speed.

**PETRO**  
Innova  
Tech



- Otimizador de produção para poços de petróleo

▶ Preço de acesso ao software por poço:

▶ a partir de US\$ 50,00 por mês



**PETRO**  
Innova  
**Tech**



- **Contato**

▶ Email:  
**info@petroinnovatech.com**

▶ Website:  
**www.petroinnovatech.com**

**OBRIGADO**