



**Total Resource and Energy Efficiency
Management System for Process Industries**

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Workshops SIM4.0

13-15/03/2018

SPRE Sustainable Process Industry through
Resource and Energy Efficiency



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Conteúdo



Desafio

Apresentação do projeto

Principais componentes

Próximos Passos

Desafio

“A indústria deve fornecer produtos e serviços com preços competitivos, que satisfaçam as necessidades e qualidade de vida do consumidor, através de compromissos inteligentes entre os desafios económicos e da sustentabilidade”

Objetivo

FAZER MAIS COM MENOS



Technical/Technological Gaps

- Falta de ferramentas simples para avaliação e otimização da eficiência de recursos e energia, que integrem aspetos operacionais, económicos e ambientais.
- Conhecimento insuficiente sobre como valorizar desperdícios (Energia, Recursos, etc.)

Management Gaps

- Não incorporação de aspetos da sustentabilidade na estratégia das empresas
- Dificuldade na definição clara e consistente de KPIs, e seu acompanhamento
- Dispersão de dados relevantes do processo por vários departamentos da empresa

Organizational Gaps

- Dificuldade na recolha e partilha de informação sobre os fluxos de processo (consume de recursos e energia, bem como, desperdícios e emissões);
- Inexistência de meios para mapear e partilhar de recursos (energia, água, desperdícios e materiais reciclados) entre unidade produtivas dentro de uma empresa ou entre empresas num parque industrial;



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Conceito



Consórcio

15 parceiros | 5 países



Coordinator



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Consórcio

Framework Developers

System Integrators

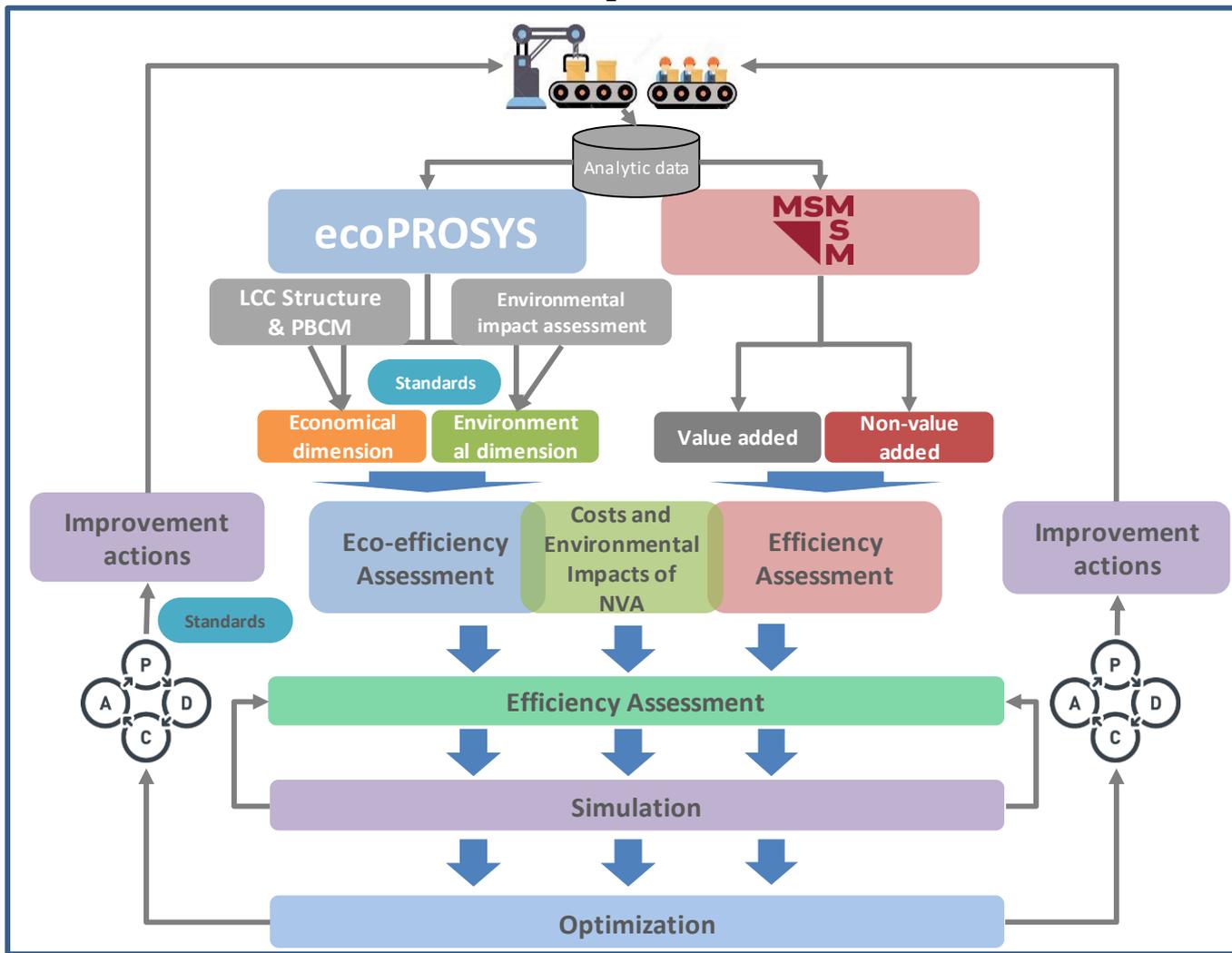
Industry

Parceiros Industriais

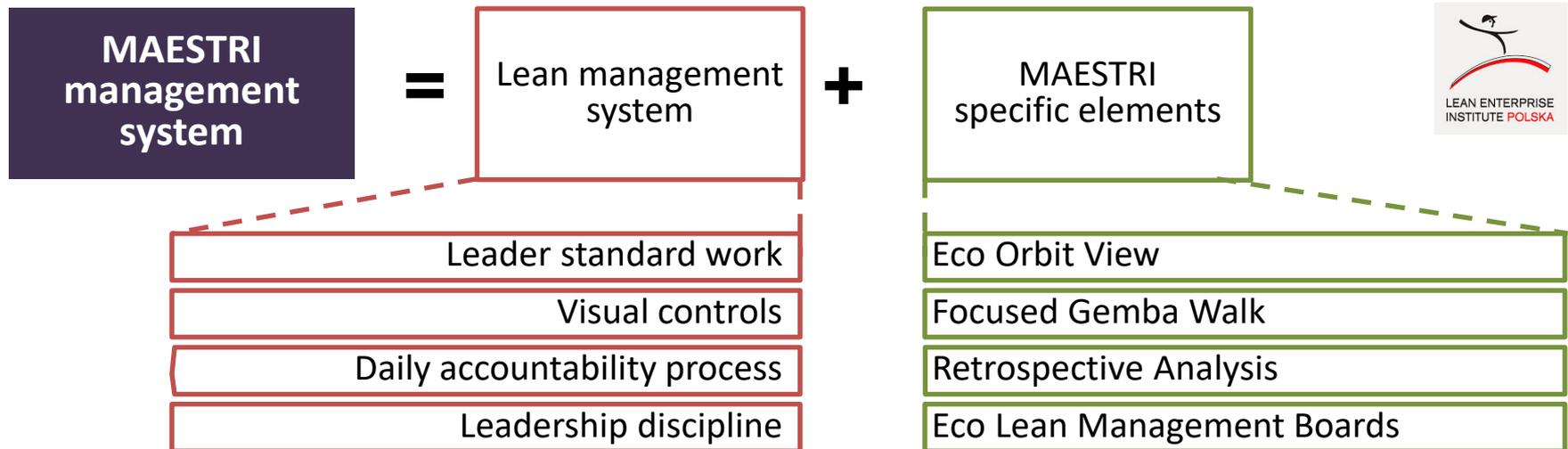
- Injecção de Plástico
- Metalomecânica
- Produtor de tintas
- Produtos químicos base



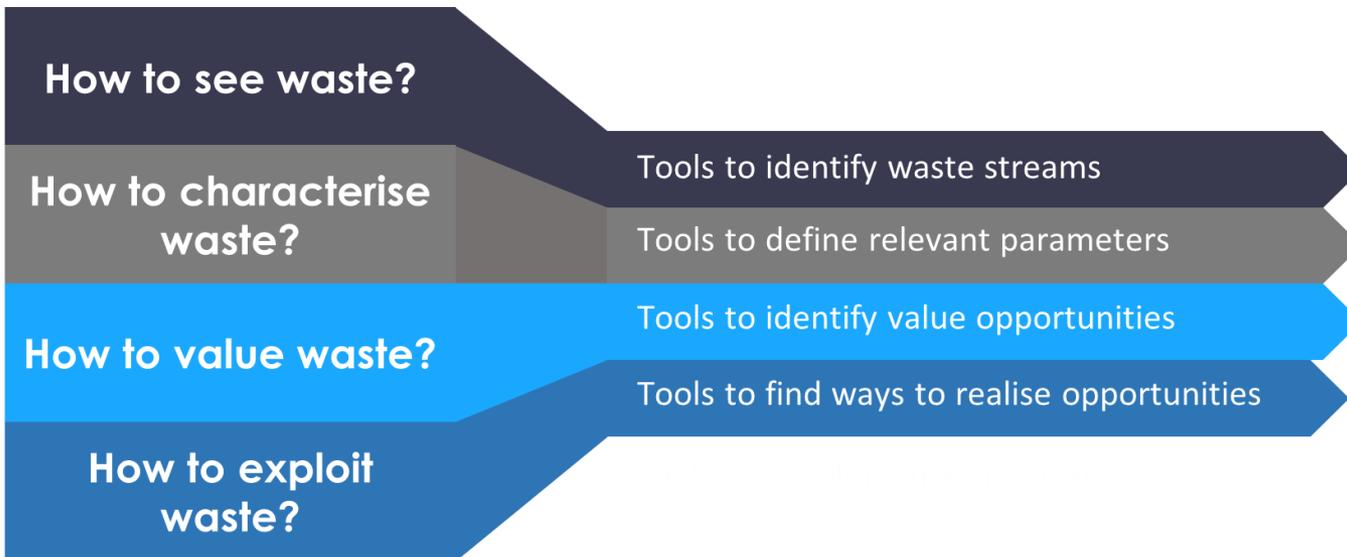
MAESTRI efficiency assessment



MAESTRI management system



MAESTRI industrial symbiosis



UNIVERSITY OF
CAMBRIDGE



Build a library of case studies

Collect a set of different case studies of Industrial Symbiosis and made them available through MAESTRI dissemination platforms

Build an open source waste database

Create a database of exchanges, based on findings from the analysis of case studies. This database will inform MAESTRI management system

Develop a toolkit for Industrial Symbiosis

Create, test and refine a set of tools to support Industrial Symbiosis activities, in particular companies could use the toolkit to identify opportunities to obtain higher value from their waste.

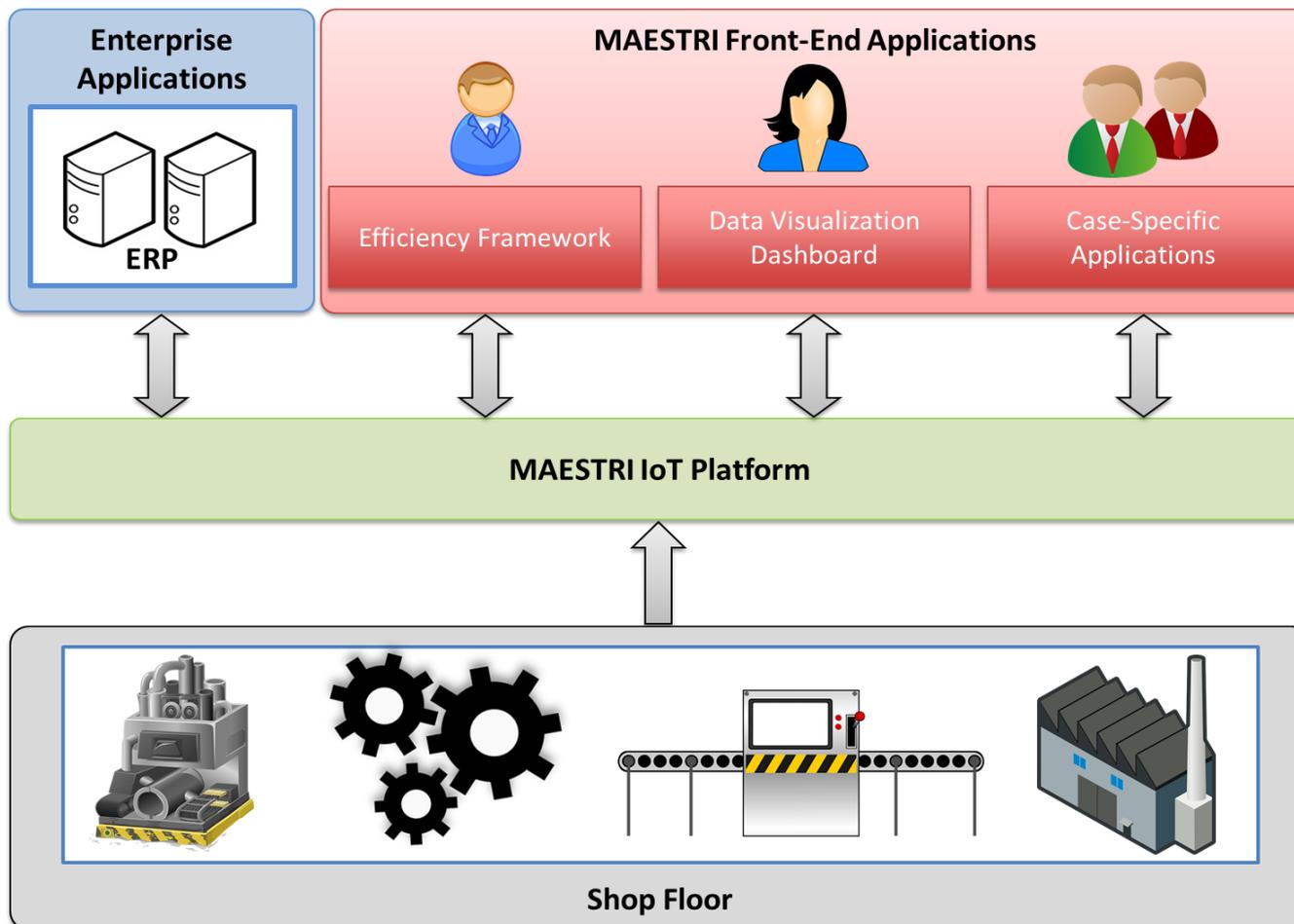


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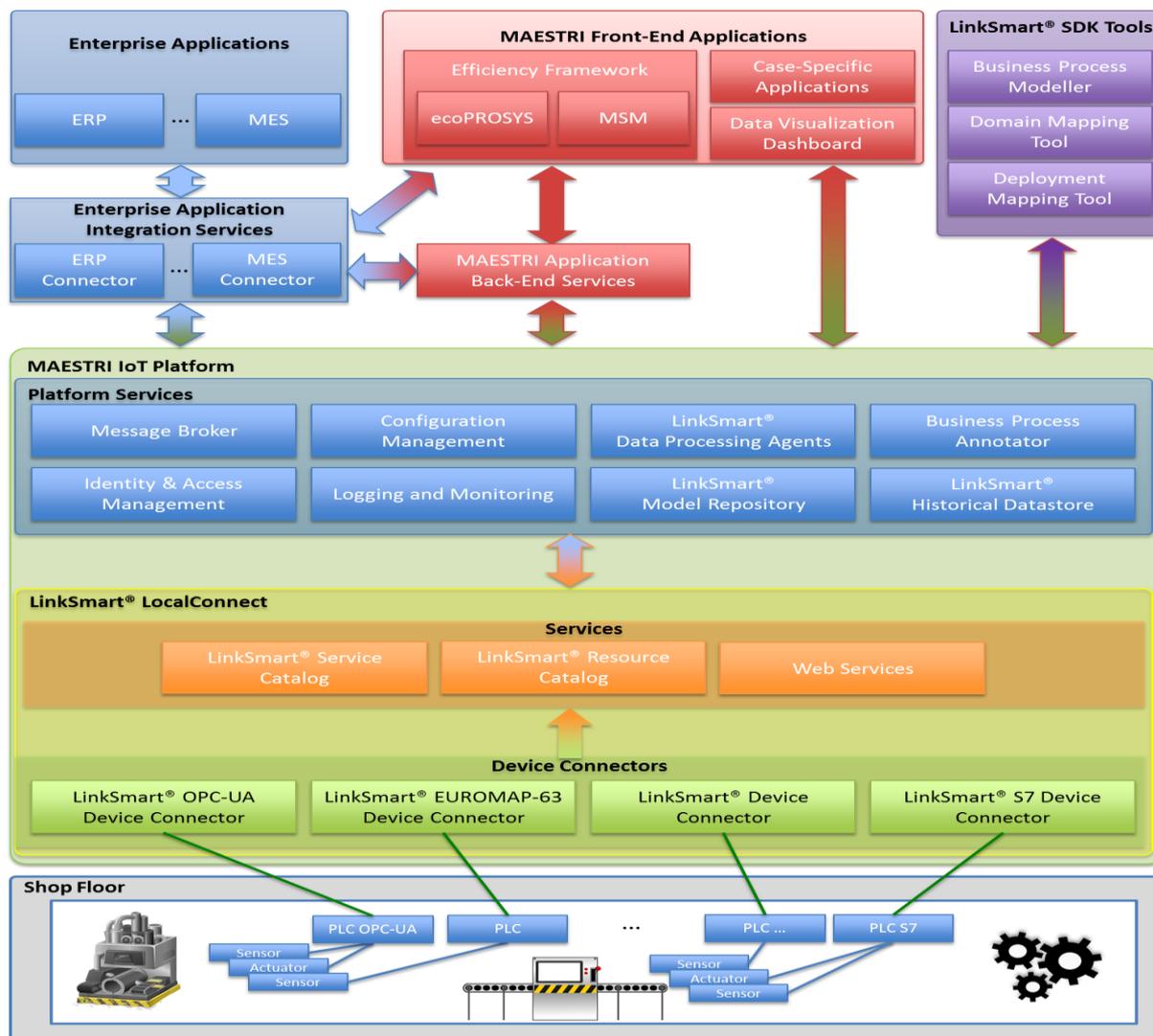


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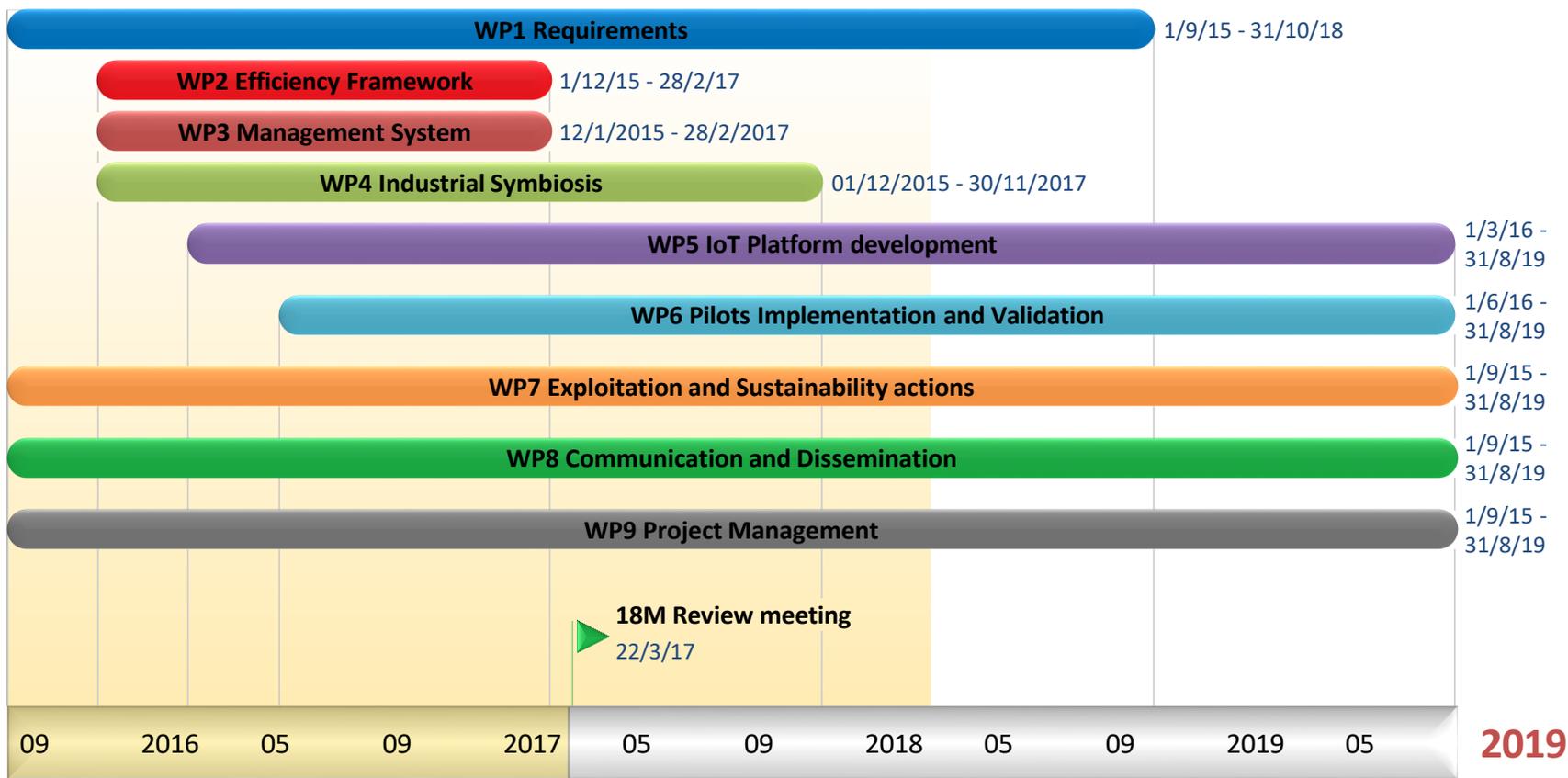
MAESTRI IoT platform



MAESTRI IoT platform



Onde estamos



Próximos passos

- Concluir a implementação da Plataforma MAESTRI nos 4 Pilotos
- Testar e validar a Plataforma MAESTRI e ferramentas de ecoeficiência

Thank you for your attention

Coordinator



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