



## Service introduction

Due-Diligence (DD) &  
Engineering Report (ER)

# CM Plus

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# What we can do

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- + To work out a facility-specialized Engineering Report (ER).
- + To support the due-diligence (DD) by providing an ER, intensive with purpose focused and distinctive on client's demand.
- + To prepare the ED both in Japanese and in English to help client smoothly complete the DD of manufacturing facility.

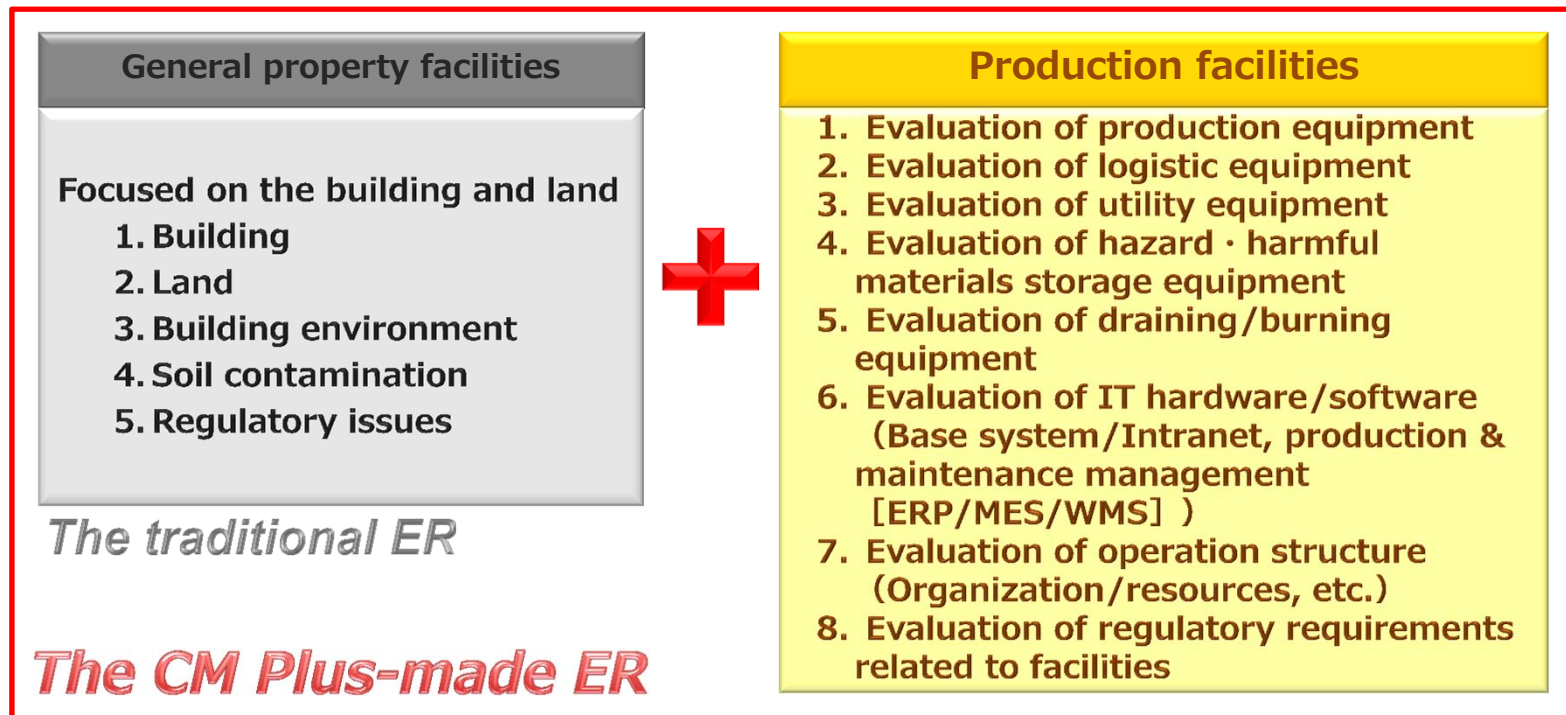


# + 1. Support to client's DD proceeding

## + Features of the ER made by CM Plus

- CM Plus is an independent firm without any capital relationship to contractors, property developers or financial sectors, etc. By that means, the ER made by CM Plus can keep the fairness and neutrality.
- Specializing in project management of production facilities engineering, CM Plus makes it possible that an ER reflects all aspects including the production equipment from a professional standpoint.

## + The key axis to evaluate the production facility projects



## 2. Procedure of ER preparations

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### + CM Plus's engineering resources to be taken in use

- ER is required to be made out in a limited period, based on the disclosed information, under an adequate and timely judgment.
- It can be made out only by the engineers who well aware of the features of the production facilities.

### + Investigation · diagnosis implemented step-by-step

#### Phase 1

- Base on disclosed information, interviews and site survey in the DD proceeding, to outline the significant risks in a timely manner.

#### Phase 2

- Base on more specific documents, site investigation results, to go further with the risk assessment conducted at Phase 1 to get ready for ED preparation.

## 2. Procedure of ER preparations

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### + Steps to reach the completion of ER



### 3. Extraction of survey items in Engineering Report

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#### **+ ER created on sufficient experience basis**

CM Plus will extract the survey items on the basis of the limited documents in use of the significantly accumulated experiences in production facilities engineering.

Upon extraction, the survey items will be classified based on the object hierarchy, then a list of survey items will be developed.

## 4. Risk assessment of survey items

### + Risk mapping

The risk assessment will be performed from the viewpoint of two impacts towards the developed survey items, one is cost impact and the other is risk impact.

#### 1. Risk assessment methodology

Each item will be evaluated using the following matrix.

- ① **Cost impact** = risk severity × cost significance
- ② **Risk impact** = risk severity × risk frequency

		Cost Impact		
		A	B	C
Risk impact	A	A	B	C
	B	B	B	C
	C	B	C	C

## 4. Risk assessment of survey items

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### + Risk mapping

#### 2. Rating the risk magnitude (Risk assessment methodology)

After evaluating by ①cost impact × ②risk impact, put the survey items into the evaluation items based on the object hierarchy as below, then make the risk mapping by going further with the collective evaluation or call it a “risk magnitude order”.

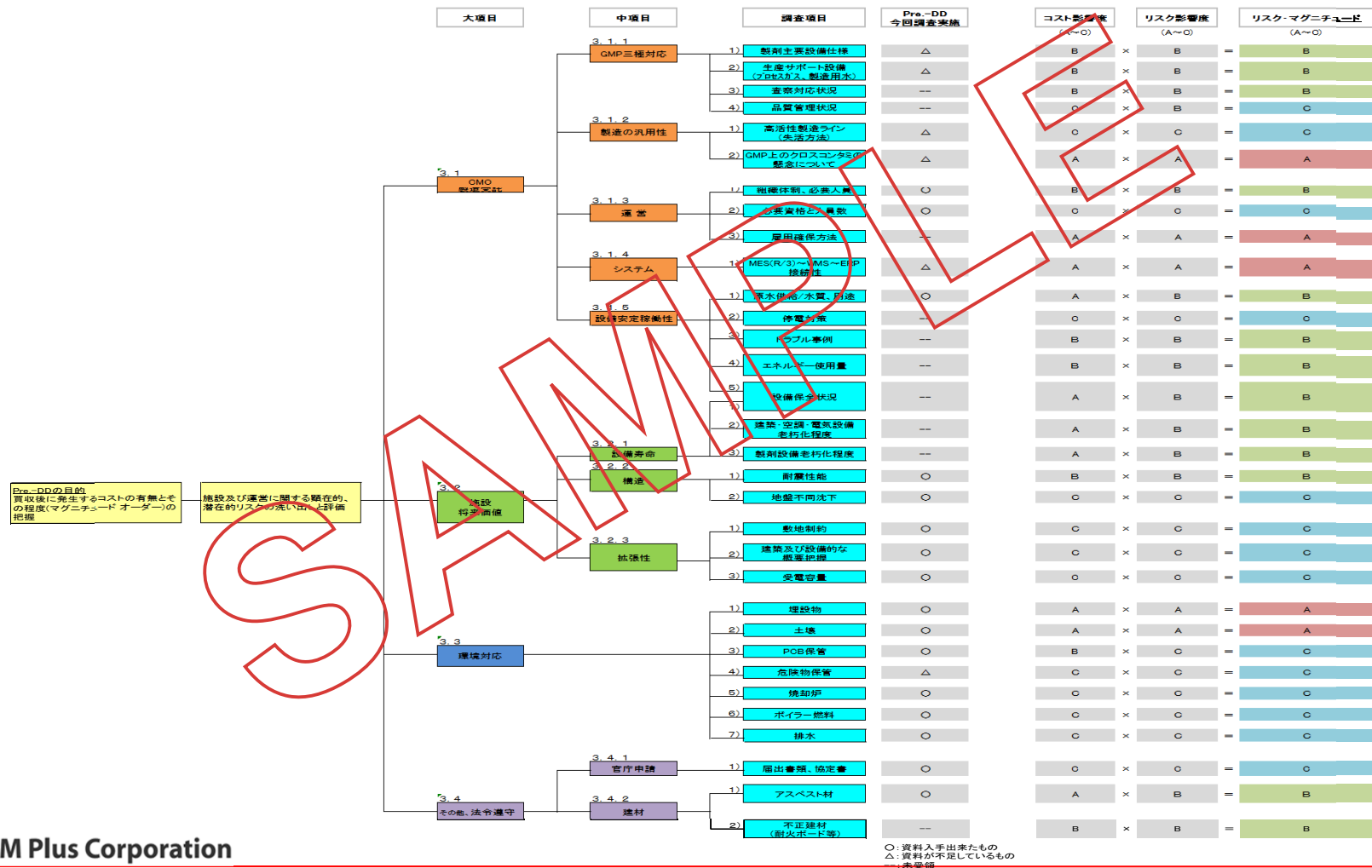
Evaluation of cost impact	
Cost impact A	More than 100 million yen
Cost impact B	More than 50 million yen
Cost impact C	Below 50 million yen



# 4. Risk assessment of survey items

## + Risk mapping

### 3. Sample of the facility risk object hierarchy



## 5. Extract/evaluate the critical items of ER

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- + CM Plus will extract the principal risks or higher risk impact items on the basis of the risk mapping methodology, and propose our solutions to those risks.
- + It is available for us to provide the related data on rating of asset values that will be definitely useful to activate the DD proceeding.

## 6. Rich in human resource and experience

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- + CM Plus is a management company specializing in the engineering of the production facility.
- + On the next sheet, you can see that our human resource consists of the qualified people rich in skill, know-how that, we believe, will lead to the success of your DD for production facilities.

# 7. Qualifications required for the ER creation

+ CM Plus will allow only the qualified subject matter experts from our human resources to involve the evaluation service for you.

◆ Qualifications associate with ER preparation    ◻ : Nationally qualified    ◻ : Engineering skill required    ● : Specialized in    ○ : business associated

ER evaluation scope	Building			Facilities			Production facilities										Remarks							
	Location	Landscape	Roof	Exterior	Interior	structure	Electrical	Plumbing	HVAC	Lifts	Legal	Process EQ	Logistic EQ	Utility EQ	Hazard Material storage	Drainage/Burning EQ		IT Equipment	Operation structure	Regulation	Maintenance	PC & QC	Environmental	Nature disaster
Architect 1st class	●	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○				●	●	●	○	○
PE [comprehensive tech supervision]	●										●								●	●	●	●	●	
PE [construction]	●	●	●	●	●	●	●	●	●	●	●			○	○	○			●	●	●	○	○	
PE [Mechanical]								○	○	●									●	●	●			
PE [Electrical & electronical]							●																	
PE [sanitary system]								●	●															
PE [Environmental]																						○	○	
PE [Application physiotherapy]																							○	
PE [Management engineering]	●										●		●					●	●	●	●			
Special building surveyor		○	●	●	●	●	○	○	○	○	●							●	●	●	●			
Building facility expert							●	●	●	●	●								●	●	●			
Building environmental facility expert										●														
Building facility inspector							●	●	●	●	●													
Licensed electrician							●							○					○					
Construction ME [1st class]	○	●	●	●	●	●													○					
Piping work ME [1st class]								●	●															
Electrical ME [1st class]							●																	
Lift inspector									●	●														
1st class health administrator																						○	○	
Environment certified measurer																						○	○	
Building structure expert	●	●	●	●	●	●					●													
Building and Facilities General management technician	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
Facility Manager	○	○	○	○	○	○	○	○	○	○	○	●	●	●	●	●	●	●	●	●	●	○	○	
Compensation business management officer		○	○	○	○	○	○	○	○	○	○													
Building renovation management engineer			●	●	●	○																		
Building finish diagnostic engineer			●	●	●	○															○			
Building equipment diagnostic engineer							●	●	●			○									○			
Soil environment supervision officer																						●		
Logistics management officer													●											
Information processing professional engineer																	●							
Qualified Energy Manager							○		○		○			○	●			○	○					
Fire protection engineer																								
Engineering Manager	○	○	○	○	○	○	○	○	○	○	○	●	●	●	●	●	○	●	●	●	○	○	○	

