

# Benghazi 2 Kiln Shut Down Maintenance Views



Inspected and repaired of fans (impellers, casing and joints) wherever required .  
Inspected and lubricated the all bearings  
Inspected and maintain cooler hydraulic system and changed hydraulic oil  
Inspected & arrested oil leakage  
Inspected and Maintained clinker crusher both bearings ,hammers ,bars and cooling disc  
Inspect & replaced worn, cracked , burnt and fractured coanda nozzles

Inspected and replaced the worn out/cracked and deformed side plates after removing the castable.  
Inspect the support grate for movable and fixed and clean under the plates inside air ducts



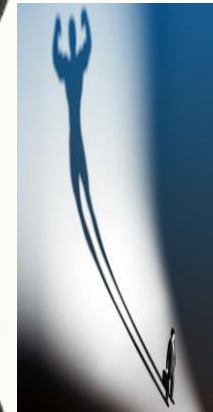
Measured chain elongation, and inspection of the chain links for cracks, wear and the connecting pins as well, and replaced the defected ones

Inspection and replacement of damaged / worn out/ holed buckets

Removal and replacement of the drive and driven sprockets due to wear and cracks

Inspection and replacement of feeding and discharge chute .

Inspected and lubricated the top and lower bearings' of the head and tail shaft of the elevator



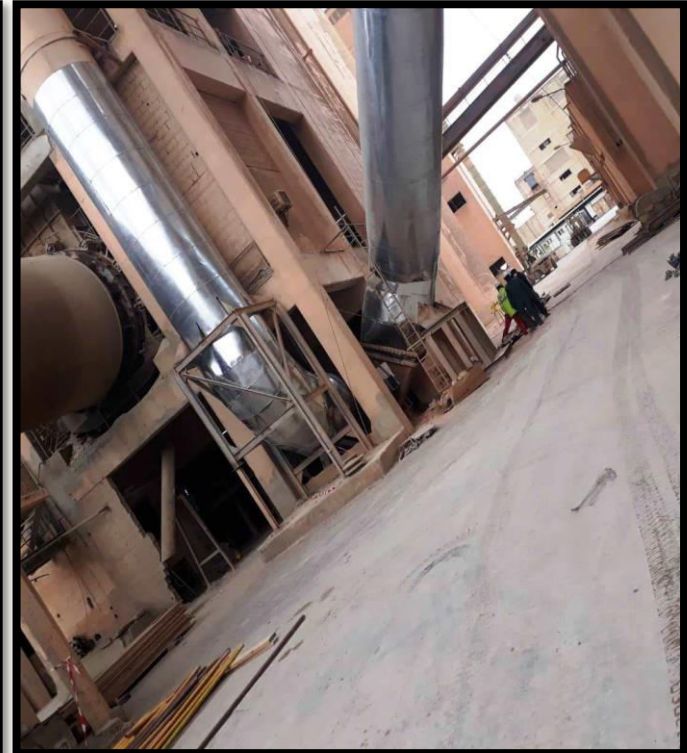
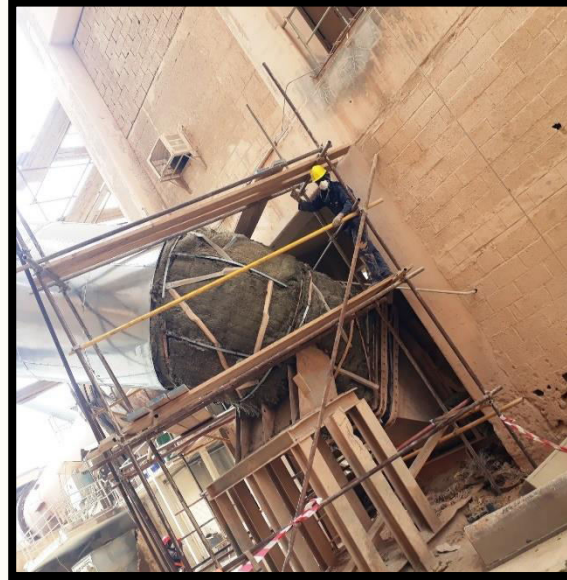




Inspected fan and replaced fan damper

Removal and installation of new cladding sheet with Rockwool at id fan delivery duct

Inspected id fan both DE and NDE bearing and lubricated



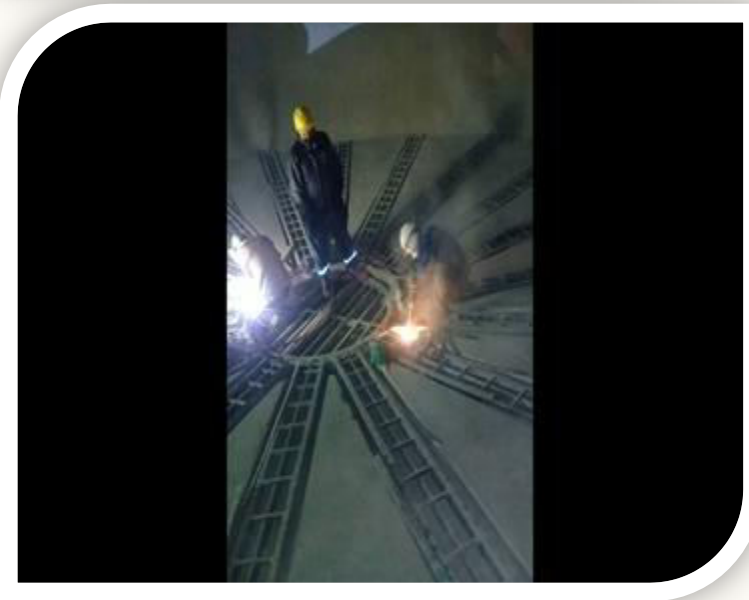




Straight  
line the kiln  
burner Tip  
portion by  
Cutting and  
Welding



Cement Silo  
internal Aeration  
Air slide casing  
leakage arrested  
and Replaced  
Fabrics





# Green Company Work Procedures and Plan

## Benghazi 2 Shutdown Maintenance Plan

ID	Task Mode	Task Name	Duration	February							
				1/12	1/19	1/26	2/2	2/9	2/16	2/23	
1		<b>P109 Bucket Elevator Maintenance Work</b>	18 days?								
2	✓	Preparation of Power isolation and work permit	1 day				100%	1/27	1/27		
3	✓	Equipment cleaning and lifting tools & tackles arrangements	1 day				100%	1/28	1/28		
4	✓	Dismantling of head base, tail shaft and maintenance inspection doors	1 day				100%	1/29	1/29		
5		scaffolding installation in elevator casing at damage area	1 day				75%	1/30	1/30		
6		<b>Elevator Casing Repairing Procedure</b>	12 days								
7		Removal of elevator casing damage portion	3 days				50%	1/31	2/4		
8		Grinding and correction of damage portion	2 days				50%	2/5	2/6		
9		Replacement and fixation of damage portion with new plate as per the standard ,	3 days				33%	2/7	2/11		

Thanks  
Omar Al Hassi  
Chairman of Board



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ID	Task Mode	Task Name	Duration	February						
				1/12	1/19	1/26	2/2	2/9	2/16	2/23
10		Sandblast, welding and painting of repair portion	3 days							
11		<b>Bucket Replacement Procedure</b>	<b>11 days?</b>							
12		Removal of old and damage bucket	4 days							
13		Replacement of bucket holder wherever needed	1 day?							
14		Fixation of new bucket and bolt tightening	6 days							
15		<b>Bucket Elevator Alignment procedure</b>	<b>11 days</b>							
16		leveling and aligenment of drive and tail shaft bearing housing	2 days							
17		Replacement of Head and Tail shaft bearing if needed	3 days							
18		Replacement of head shaft sprocket segment if required	2 days							

**Thanks**  
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ID	Task Mode	Task Name	Duration	February							
				1/12	1/19	1/26	2/2	2/9	2/16	2/23	
19		Inspection and adjustment of chain elongation, replacement of chain links, pins wherever needed	3 days					2/14	0%	2/18	
20		Trial run and box up	1 day					2/19	0%	2/19	
21	✓	<b>K301 Replacement of Preheater/Id Fan Dampper and Bearing Inspection</b>	<b>19 days</b>								
22	✓	<b>I.D Fan Bearing inspection and Maintenance</b>	<b>19 days</b>								
23	✓	Isolation and work permit preparation	0.5 days					1/27	100%	1/27	
24	✓	Bearing clearance inspection	2 days					1/29	100%	1/27	
25	✓	inspection and Replacement of bearing if needed	3 days					1/29	100%	2/3	
26	✓	inspection fan bearing housing and impler	3 days					2/3	100%	2/6	
27	✓	Inspection and Adjustment of cone gap	2 days					2/6	100%	2/10	

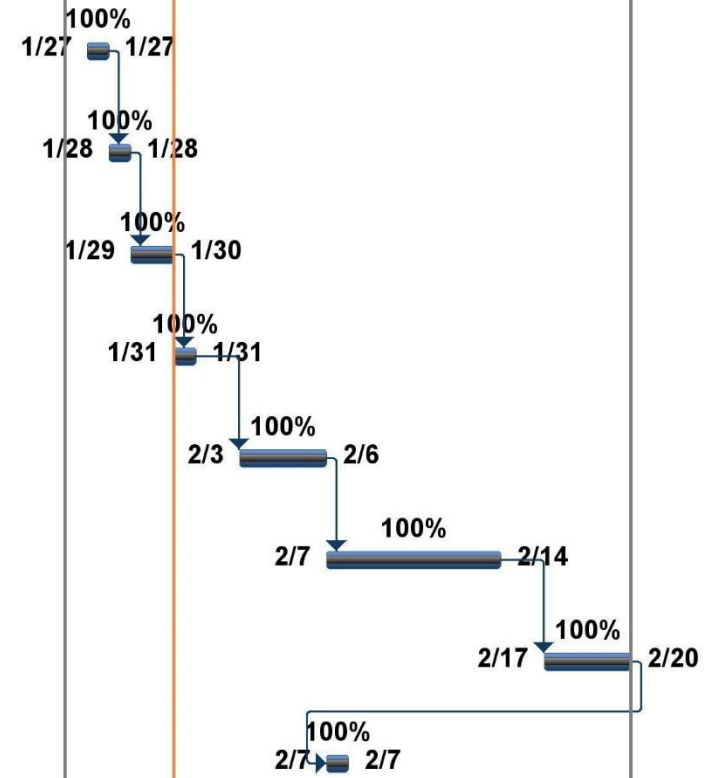
**Thanks**  
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**Chairman of Board**





### Benghazi 2 Shutdown Maintenance Plan

ID	Task Mode	Task Name	Duration	February								
				1/12	1/19	1/26	2/2	2/9	2/16	2/23		
28	✓	Id fan damper replacement	19 days									
29	✓	Arrangement and fixation of support	1 day									
30	✓	Removal of damper bolts	1 day									
31	✓	Dismantle of complete damper	2 days									
32	✓	Surface cleaning of damper flange	1 day									
33	✓	Installation of new damper and alignment	4 days									
34	✓	Insulation of id fan duct as shown on site visit	6 days									
35	✓	Replacement of fan out let and inlet duct insulation	4 days									
36	✓	Tightening of damper bolts and test	1 day									
37	✓	K328 6.01 Screw conveyor	12 days									



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				1/12	1/19	1/26	2/2	2/9	2/16	2/23		
38	✓	Inspection & repairing oHanger /central bearing &bolts	3 days			100% 1/27						
39	✓	Inspection & repairing of screw flights	3 days			100% 1/30						
40	✓	inspection and Replacement of gland seal in drive and tail shaft	2 days				100% 2/4					
41	✓	inspection and replacement of drive and tail bearing if needed	3 days				100% 2/6					
42	✓	Trial run and box up	1 day					100% 2/11				
43		<b>D210 Bucket Elevator Maintenance Work</b>	<b>11 days</b>									
44	✓	Preparation of Power isolation and work permit	1 day			100% 1/27						
45	✓	Equipment cleaning and lifting tools & tackles arrangements	1 day			100% 1/28						
46	✓	Inspection of the top and lower bearings & change the grease	2 days			100% 1/29						
47	✓	Inspection & repair chain and sprockets	2 days			100% 1/31						

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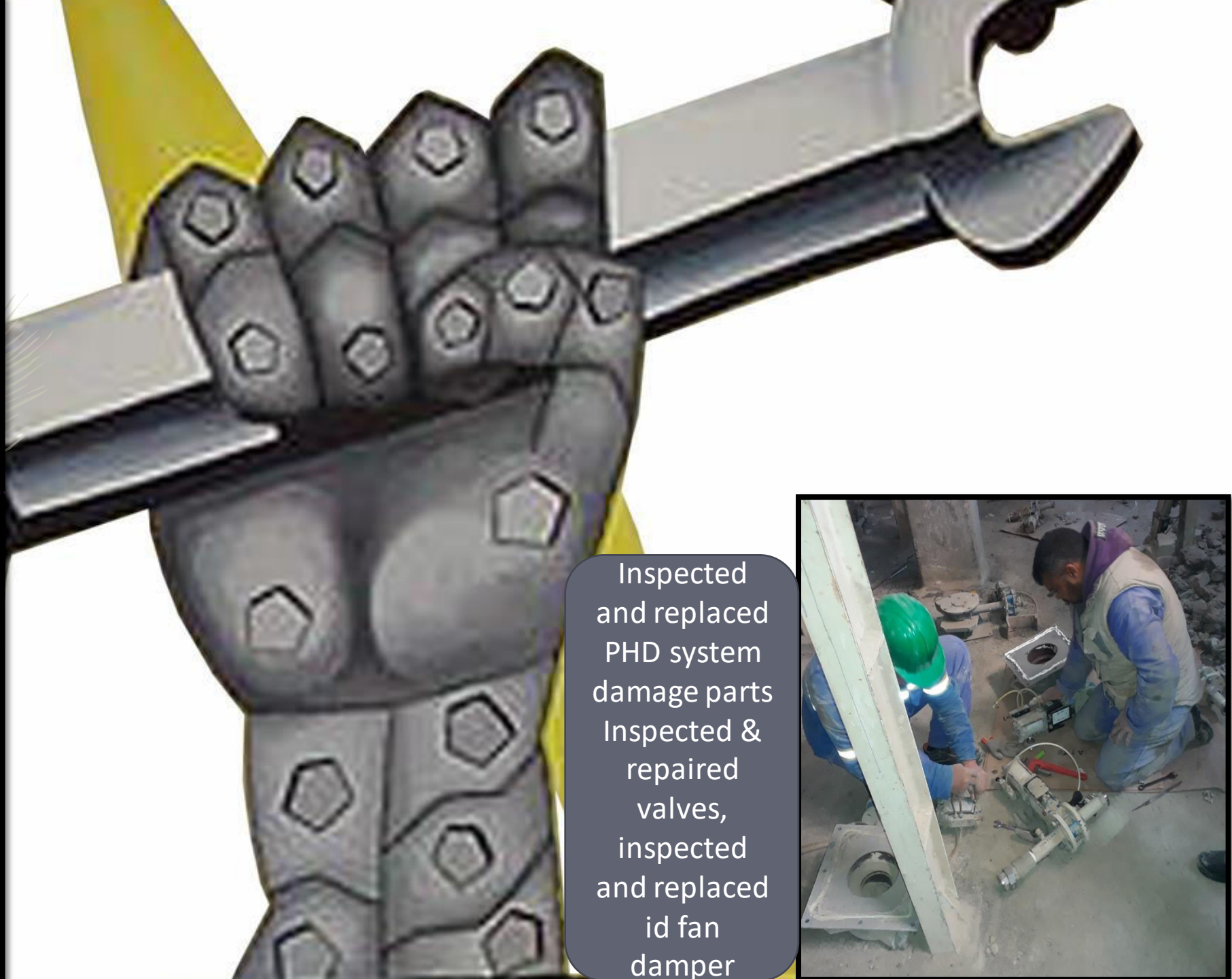


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ID	Task Mode	Task Name	Duration	February							
				1/12	1/19	1/26	2/2	2/9	2/16	2/23	
48		Inspection & Change the damaged buckets	3 days				50%				
49		Repair the casing of the bucket elevator	2 days					50%			
50		<b>K318 Bucket Elevator Maintenance Work</b>	<b>10 days</b>			←————→					
51	✓	Inspection of the top and lower bearings & change the grease	2 days			100%					
52	✓	Inspection & repair chain and sprockets	2 days			100%					
53		Inspection & Change the damaged buckets	3 days				75%				
54		Inspection & repair wheels Repair the casing of the bucket elevator	3 days					50%			

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 Chairman of Board

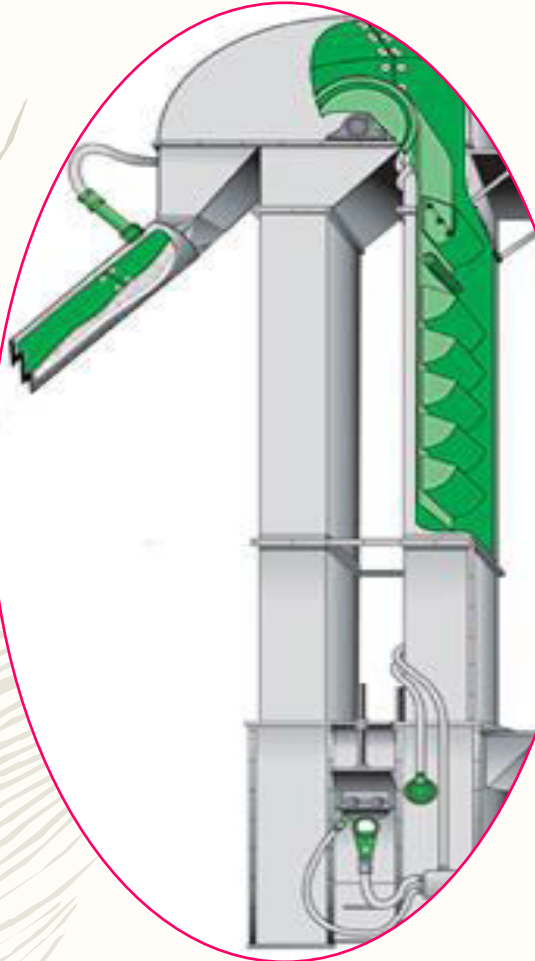




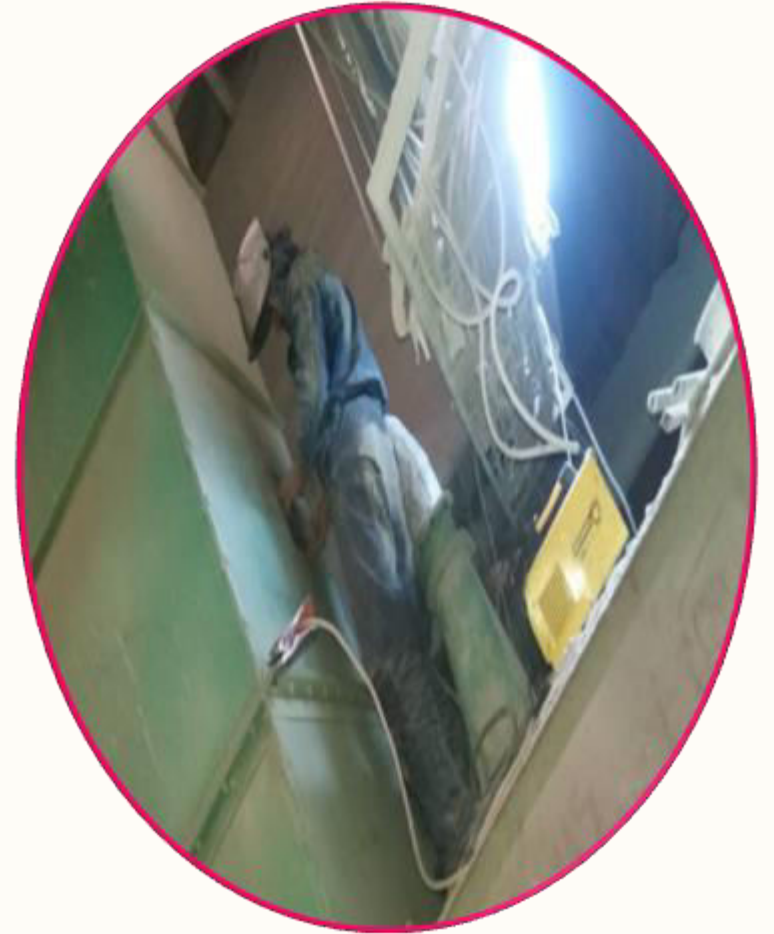
Inspected and replaced PHD system damage parts  
Inspected & repaired valves,  
inspected and replaced id fan damper







Repaired  
elevator casing  
according to  
thickness  
measurements  
and leaking of  
material.



# Green Company Resources

People

Qualified  
Technicians

Equipment

Heavy and  
Light  
Industrial  
Tools  
Equipment's

Locations

Benghazi

Outside  
Services

Cement, Oil,  
gas and  
Power  
Sector

Sales

We are  
familiar to  
supply all kind  
of industrial  
spare parts

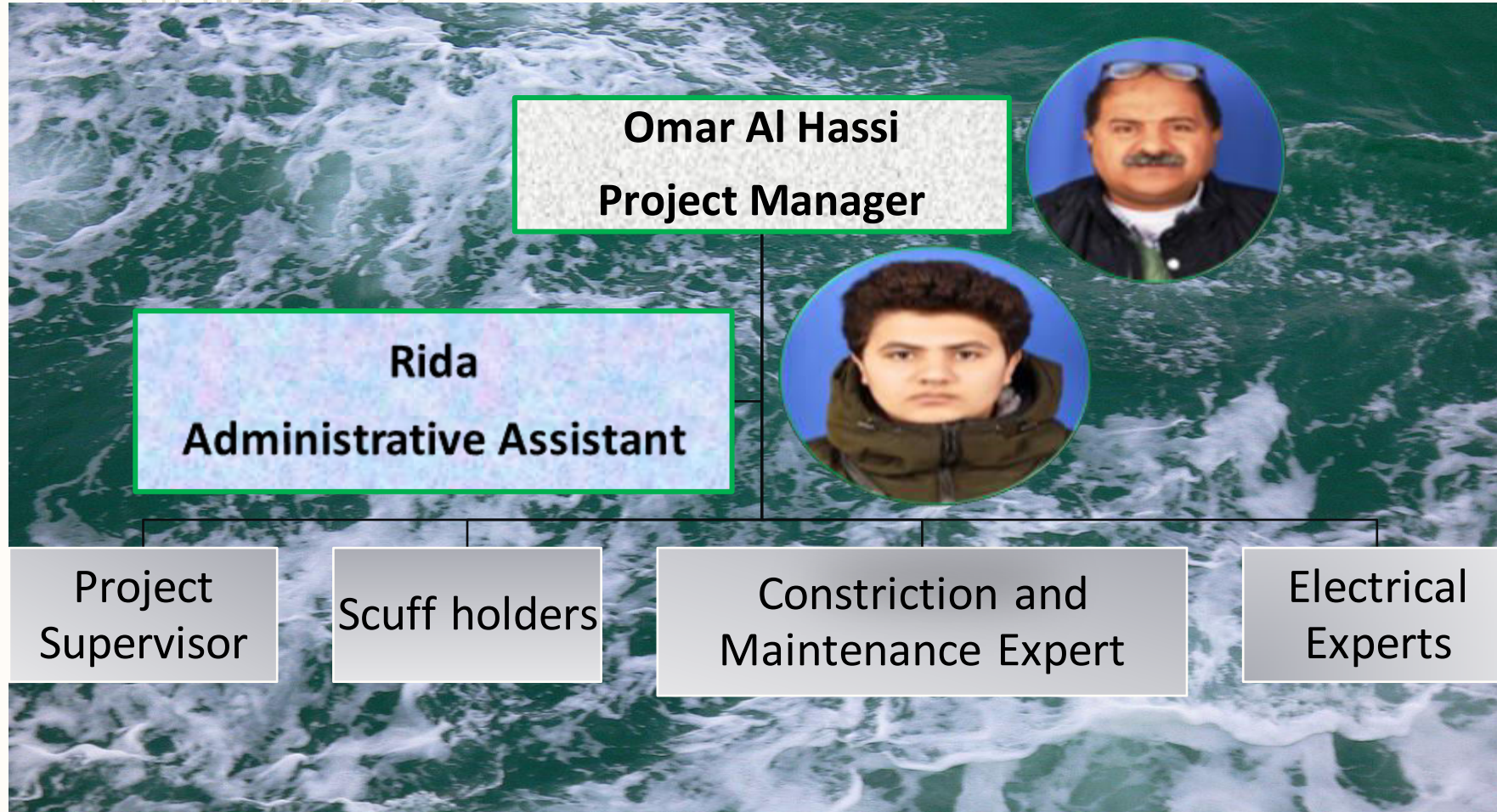


# Green company strength





# Project Team Roles and Responsibilities



# Green Company Success Factors

- Satisfied clients
  - Met project objectives
  - Completed within budget
  - Delivered on time
- 

Thanks

Presented By

Omar Al Hassi

Chairman of Board

