

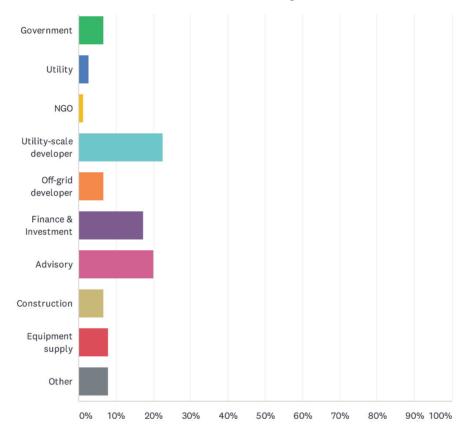




African Energy Survey

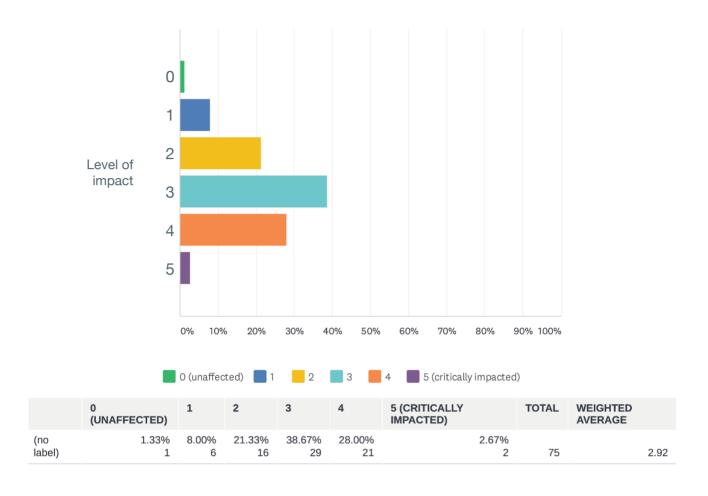
Below are basic results from the online industry survey which took place between 1-29 April 2020. Further analysis of the survey will be given at the AIX Webinar at 13:00 GMT+1 on 30 April.

Q1. Please tick the sector which best describes your business.

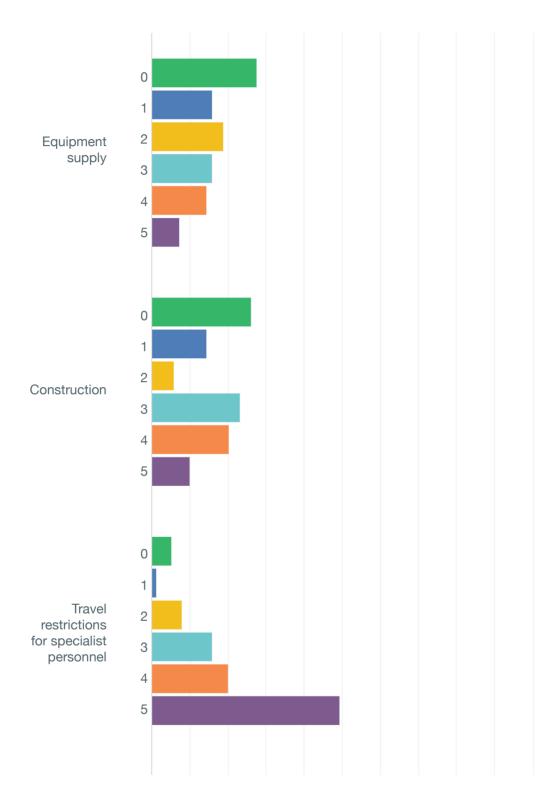


ANSWER CHOICES	RESPONSES	
Government	6.67%	5
Utility	2.67%	2
NGO	1.33%	1
Utility-scale developer	22.67%	17
Off-grid developer	6.67%	5
Finance & Investment	17.33%	13
Advisory	20.00%	15
Construction	6.67%	5
Equipment supply	8.00%	6
Other	8.00%	6
TOTAL		75

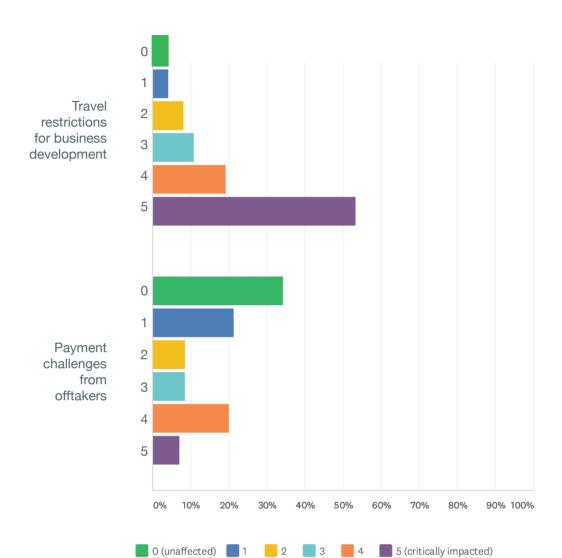
Q2. How impacted has your business been by Covid-19 on a scale of 0 to 5, where 0 is completely unaffected and 5 is critically impacted?



Q3. Please rate the following in terms of where the impact of the Covid-19 has most affected your business (0 is completely unaffected and 5 is critically impacted)

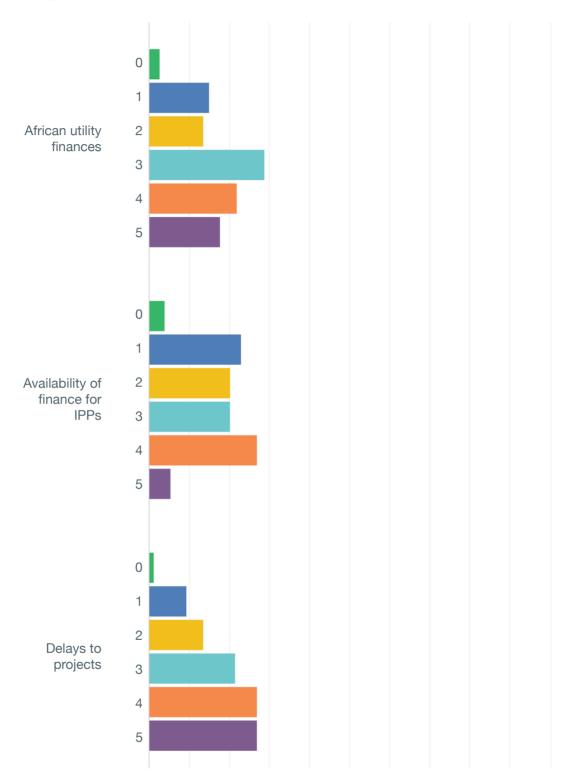


Q3. Continued

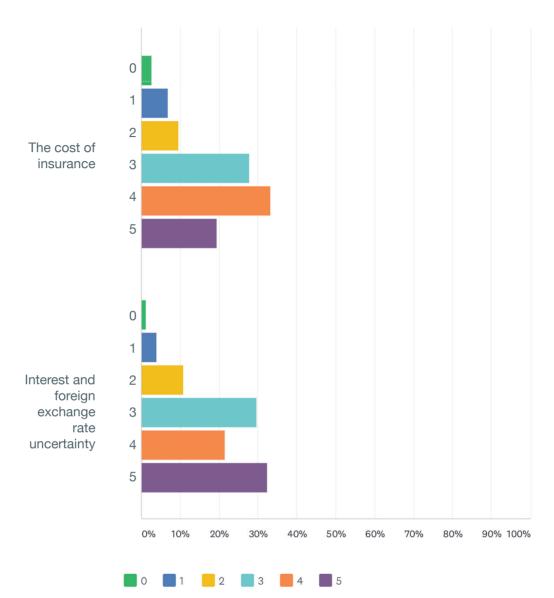


	0 (UNAFFECTED)	1	2	3	4	5 (CRITICALLY IMPACTED)	TOTAL	WEIGHTED AVERAGE
Equipment supply	27.54% 19	15.94% 11	18.84% 13	15.94% 11	14.49% 10	7.25% 5	69	1.96
Construction	26.09% 18	14.49% 10	5.80% 4	23.19% 16	20.29% 14	10.14% 7	69	2.28
Travel restrictions for specialist personnel	5.33% 4	1.33%	8.00% 6	16.00% 12	20.00% 15	49.33% 37	75	3.92
Travel restrictions for business development	4.11% 3	4.11% 3	8.22% 6	10.96% 8	19.18% 14	53.42% 39	73	3.97
Payment challenges from offtakers	34.29% 24	21.43% 15	8.57% 6	8.57% 6	20.00% 14	7.14% 5	70	1.80

Q4. Please rate your expectations of how severe the impact of Covid-19 could be over a 5 year time horizon on each of the following, where 0 is no impact and 5 is severe impact?

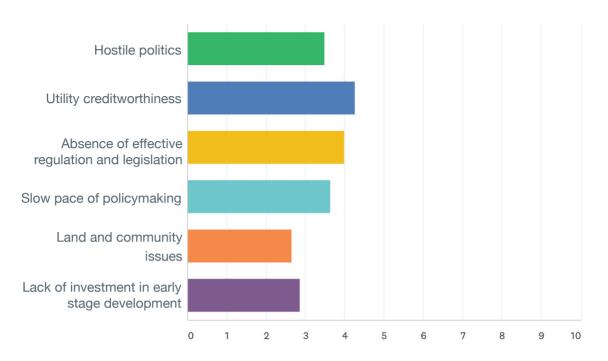


Q4. Continued



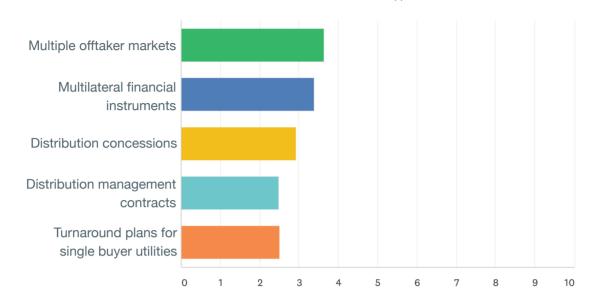
	0	1	2	3	4	5	TOTAL	WEIGHTED AVERAGE
African utility finances	2.74% 2	15.07% 11	13.70% 10	28.77% 21	21.92% 16	17.81% 13	73	4.05
Availability of finance for IPPs	4.05% 3	22.97% 17	20.27% 15	20.27% 15	27.03% 20	5.41% 4	74	3.59
Delays to projects	1.35% 1	9.46% 7	13.51% 10	21.62% 16	27.03% 20	27.03% 20	74	4.45
The cost of insurance	2.78%	6.94% 5	9.72% 7	27.78% 20	33.33% 24	19.44% 14	72	4.40
Interest and foreign exchange rate uncertainty	1.35%	4.05% 3	10.81% 8	29.73% 22	21.62% 16	32.43% 24	74	4.64

Q5. Please rank the following (1-6) in order of the impact on power project development times



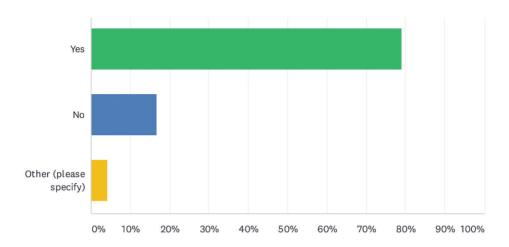
	1	2	3	4	5	6	TOTAL	SCORE
Hostile politics	20.59% 14	5.88% 4	22.06% 15	20.59% 14	14.71% 10	16.18% 11	68	3.49
Utility creditworthiness	27.14% 19	22.86% 16	20.00% 14	12.86% 9	14.29% 10	2.86%	70	4.27
Absence of effective regulation and legislation	16.42% 11	23.88% 16	20.90% 14	20.90% 14	16.42% 11	1.49% 1	67	3.99
Slow pace of policymaking	13.04% 9	20.29% 14	21.74% 15	20.29% 14	13.04% 9	11.59% 8	69	3.65
Land and community issues	4.35% 3	11.59% 8	11.59% 8	17.39% 12	27.54% 19	27.54% 19	69	2.65
Lack of investment in early stage development	15.28% 11	13.89% 10	5.56% 4	11.11% 8	15.28% 11	38.89% 28	72	2.86

Q6. Please rank the following policy alternatives (1-5) in order of their prospects over a 5 year time horizon for allowing governments to move away from sovereign guarantees?



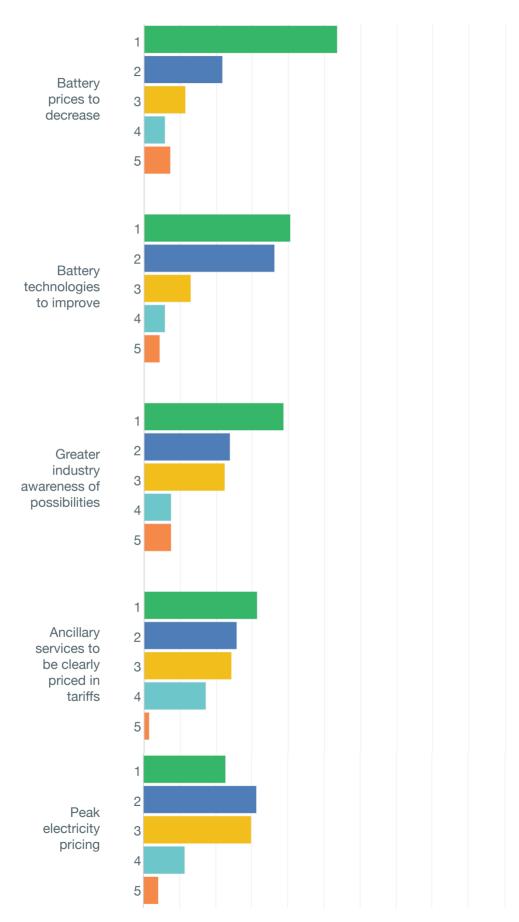
	1	2	3	4	5	TOTAL	SCORE
Multiple offtaker markets	42.42%	19.70%	9.09%	16.67%	12.12%		
	28	13	6	11	8	66	3.64
Multilateral financial instruments	29.85%	25.37%	10.45%	22.39%	11.94%		
	20	17	7	15	8	67	3.39
Distribution concessions	10.77%	21.54%	26.15%	32.31%	9.23%		
	7	14	17	21	6	65	2.92
Distribution management contracts	2.99%	19.40%	29.85%	19.40%	28.36%		
	2	13	20	13	19	67	2.49
Turnaround plans for single buyer utilities	11.59%	13.04%	27.54%	11.59%	36.23%		
	8	9	19	8	25	69	2.52

Q7. Both battery and thermal options will be required in low carbon electricity supply industries?

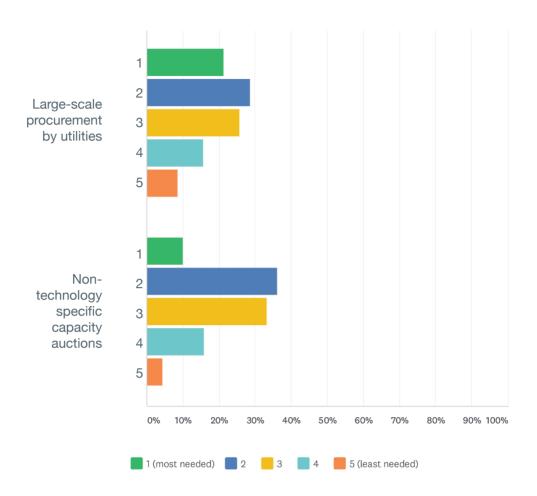


ANSWER CHOICES	RESPONSES	
Yes	79.17%	57
No	16.67%	12
Other (please specify)	4.17%	3
TOTAL		72

Q8-. Please rate the following (1-5, where 1 is most needed). For the battery industry to take off in Africa, it needs:

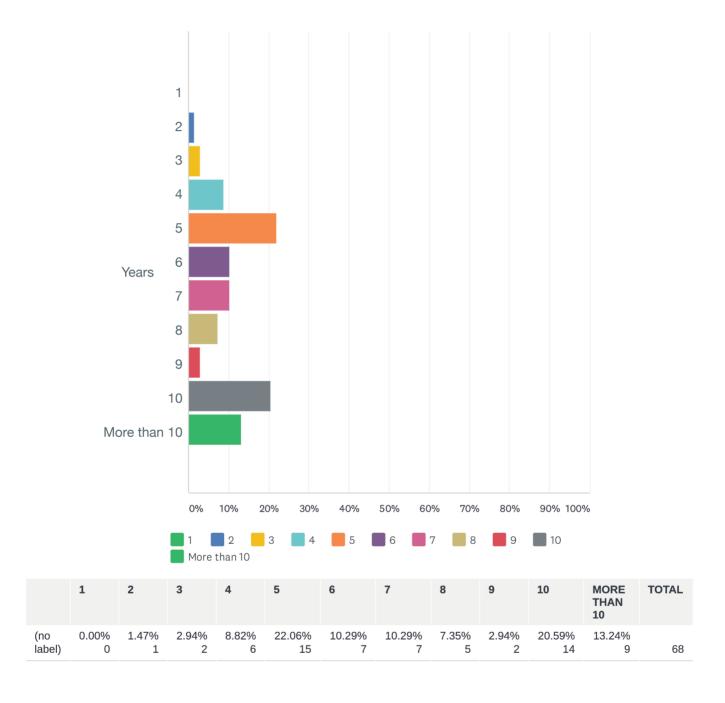


Q8. Continued

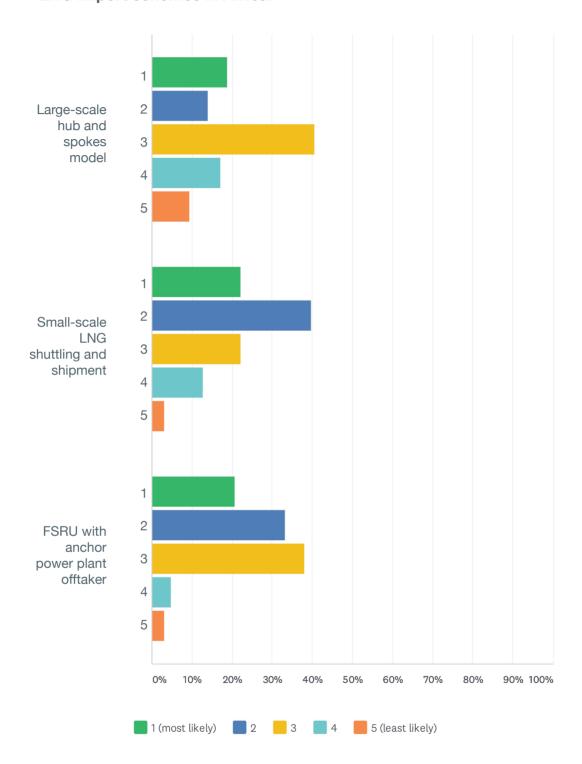


	1 (MOST NEEDED)	2	3	4	5 (LEAST NEEDED)	TOTAL	WEIGHTED AVERAGE
Battery prices to decrease	53.62% 37	21.74% 15	11.59% 8	5.80% 4	7.25% 5	69	1.91
Battery technologies to improve	40.58% 28	36.23% 25	13.04% 9	5.80% 4	4.35% 3	69	1.97
Greater industry awareness of possibilities	38.81% 26	23.88% 16	22.39% 15	7.46% 5	7.46% 5	67	2.21
Ancillary services to be clearly priced in tariffs	31.43% 22	25.71% 18	24.29% 17	17.14% 12	1.43% 1	70	2.31
Peak electricity pricing	22.86% 16	31.43% 22	30.00% 21	11.43% 8	4.29% 3	70	2.43
Large-scale procurement by utilities	21.43% 15	28.57% 20	25.71% 18	15.71% 11	8.57% 6	70	2.61
Non-technology specific capacity auctions	10.14% 7	36.23% 25	33.33% 23	15.94% 11	4.35% 3	69	2.68

Q9. How many years is Africa from the -- use of LNG for power generation?



Q10. Please rate the following (1-5, where 1 is most likely) in terms of their prospects as LNG import schemes in Africa:



Q10. Continued

	1 (MOST LIKELY)	2	3	4	5 (LEAST LIKELY)	TOTAL	WEIGHTED AVERAGE
Large-scale hub and spokes model	18.75% 12	14.06% 9	40.63% 26	17.19% 11	9.38% 6	64	2.84
Small-scale LNG shuttling and shipment	22.22% 14	39.68% 25	22.22% 14	12.70% 8	3.17%	63	2.35
FSRU with anchor power plant offtaker	20.63% 13	33.33% 21	38.10% 24	4.76% 3	3.17%	63	2.37



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