



SPDC

Reduce Fuel Consumption

Time scope: Mar 2022
Tue, Mar 01 2022 - Thu, Mar 31 2022

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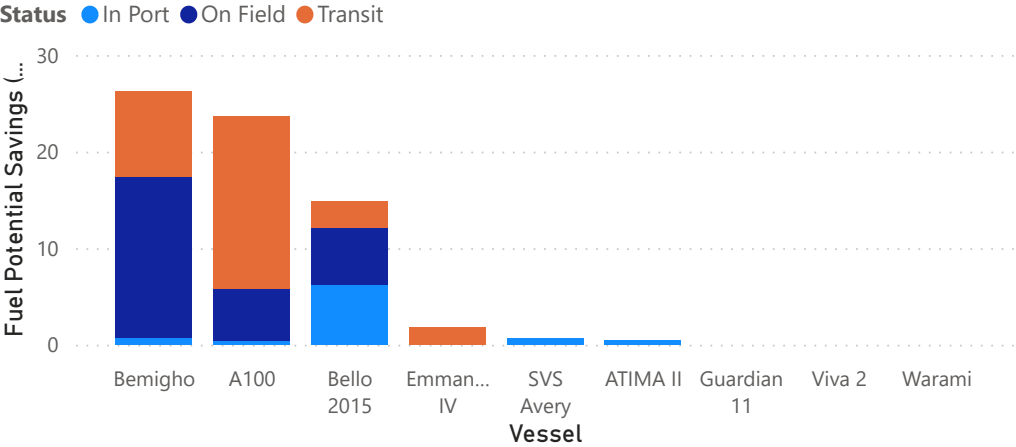
SUMMARY

Warami used the buoy a lot -> Best practice (Fuel impact 67,1 m3)
A100 used DP stand-by a lot. Practice can be improved
Bemigho has entered the fuel challenge. Recommendations have been sent to the vessel.

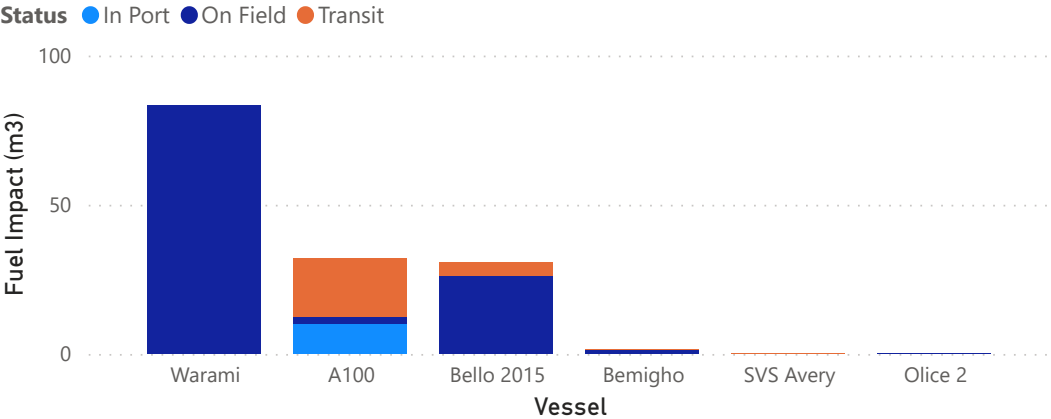
Vessel Type	Vessel	Nb of Daily Report	Fuel Consumption per day (m3)	Fuel Consumption Actual (m3)	Fuel Potential savings (m3)	Fuel Impact (m3)	Fuel Consumption Predicted (m3) *
AHTS	Bello 2015	31	6,95	215,30	14,93	30,81	246,11
AHTS	Warami	31	6,87	212,90	0,00	83,39	296,29
Crew Supply Vessel	Viva 2	24	1,40	33,58	0,00	0,00	33,58
FSIV	ATIMA II	31	1,46	45,35	0,47	0,00	45,35
FSIV	Emmanuella IV	31	1,38	42,93	1,83	0,00	42,93
PSV	A100	31	8,62	267,26	23,67	32,04	299,30
PSV	Bemigho	31	8,15	252,68	26,24	1,56	254,24
Security Vessel	Guardian 11	31	0,68	20,99	0,00	0,00	20,99
Security Vessel	SVS Avery	31	1,96	60,91	0,66	0,16	61,07
Total		272	4,23	1 151,90	67,79	147,97	1 299,87

* Fuel Consumption Predicted is the calculated fuel consumption without Opsealog impact.

Fuel Potential savings per Status



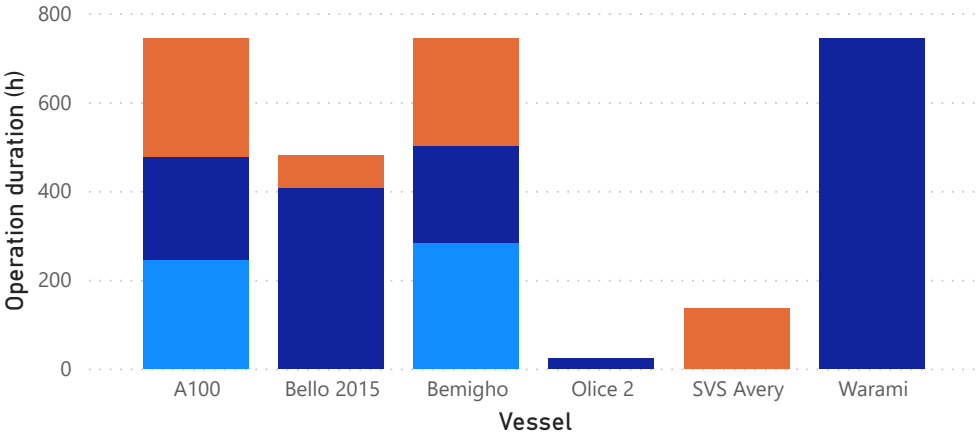
Fuel Impact per Status



SUMMARY

Operation duration per Status

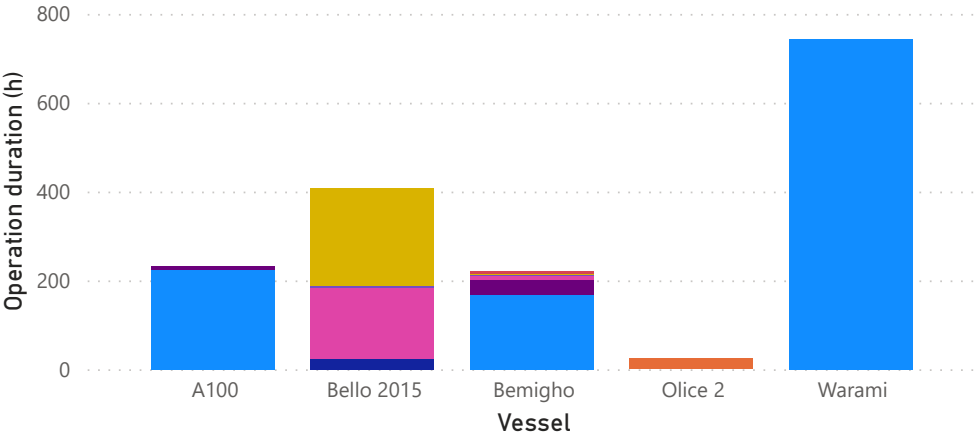
Status ● In Port ● On Field ● Transit



The side graph shows the duration and status of operation that have generated fuel impact

Operation duration per location

Location ● BONGA FP... ● ESCRAVOS ● FORCAD... ● Q7000 ● SEA EAGL... ● SEA EA... ▶



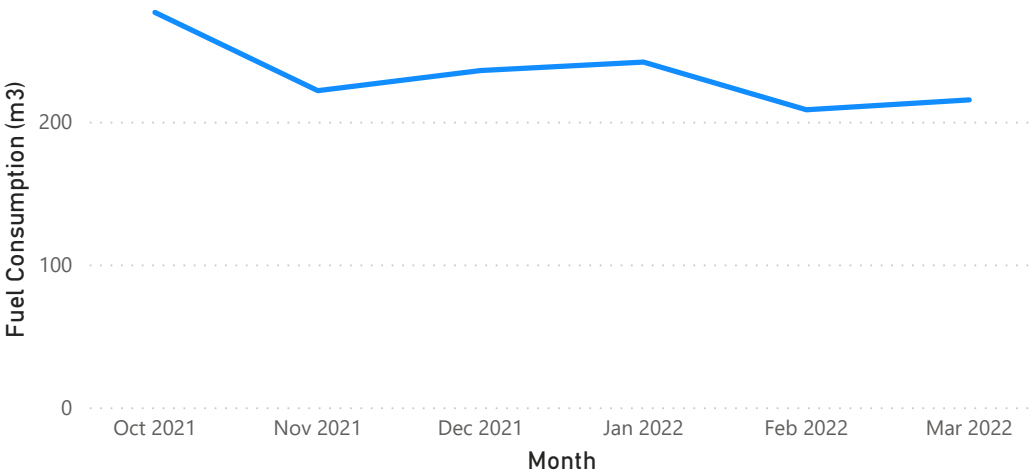
Bello 2015 - AHTS

Best Practices and recommendations

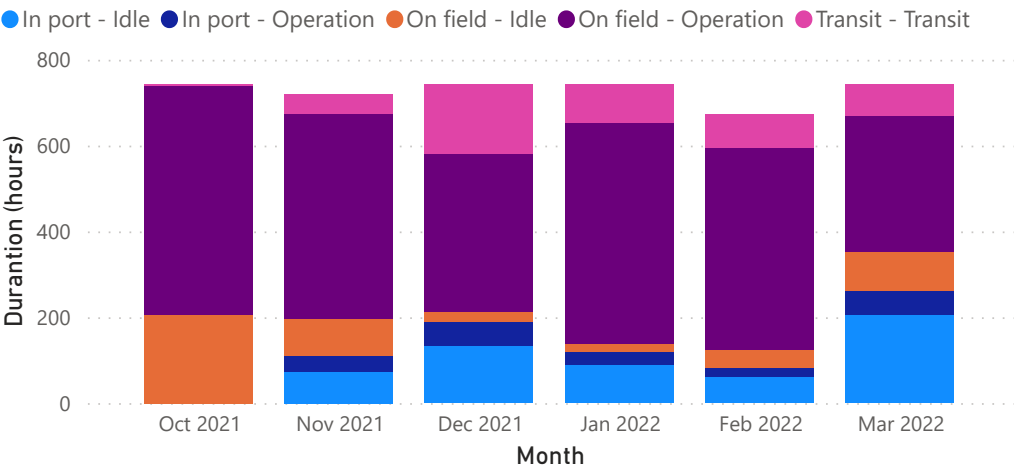
Good practices overall, Fuel impact increased

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Oct 2021	276,56	0,50	76,26	1,26	5,10	22,18
Nov 2021	221,75	6,35	27,25	1,23	6,31	280,85
Dec 2021	235,85	26,53	7,01	1,20	5,36	867,85
Jan 2022	241,77	7,01	20,24	1,22	6,94	627,76
Feb 2022	208,38	8,82	19,18	1,14	6,33	488,91
Mar 2022	215,30	14,93	30,81	1,07	6,56	485,01
Total	1 399,61	64,14	180,75	1,19	6,13	2 772,57

Monthly Fuel Consumption



Operational Profile



Bello 2015

Stand-By on Field

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Oct 2021	0,00	47,08	0,06	202,58
Nov 2021	0,00	12,08	0,67	58,43
Jan 2022	0,00	1,07	2,00	9,08
Feb 2022	0,00	0,01	2,00	0,18
Mar 2022	5,07	12,03	1,53	84,77
Total	5,07	72,27	0,56	355,05

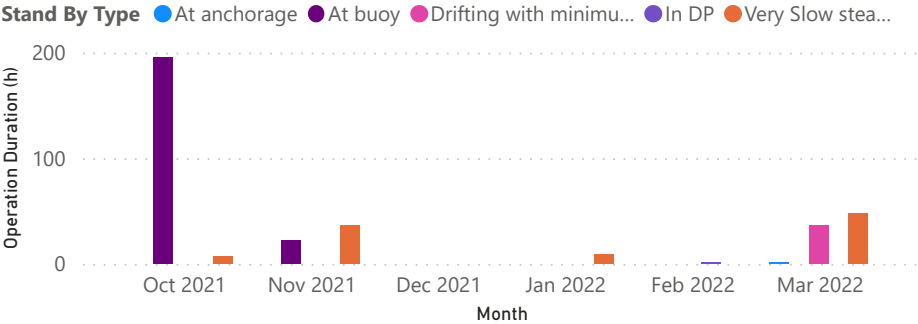
Operational Stand-by

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Oct 2021	0,49	28,11	2,00	2,67
Nov 2021	5,36	10,93	2,00	28,97
Dec 2021	4,40	6,11	2,00	23,80
Jan 2022	0,67	19,69	2,00	3,72
Feb 2022	1,44	15,65	2,00	11,66
Mar 2022	0,87	14,40	2,00	4,83
Total	13,24	94,89	2,00	75,65

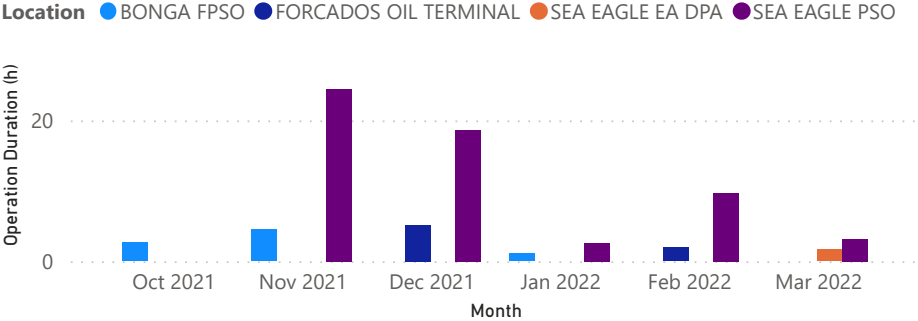
Transit

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Oct 2021	0,00	1,08	1,11	5,10	22,18	4,35
Nov 2021	1,00	4,24	2,00	6,31	280,85	44,53
Dec 2021	19,53	0,89	2,00	5,36	867,85	162,00
Jan 2022	6,14	-0,52	2,00	6,94	627,76	90,52
Feb 2022	4,34	3,52	2,00	6,33	488,91	77,25
Mar 2022	2,79	4,39	2,07	6,56	485,01	73,95
Total	33,80	13,59	2,00	6,13	2 772,57	452,60

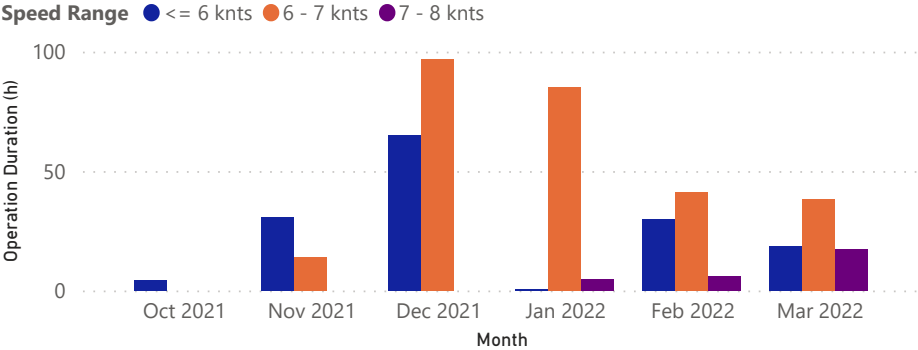
Stand-By Type



Operational Stand-by per location



Speed Distribution in transit



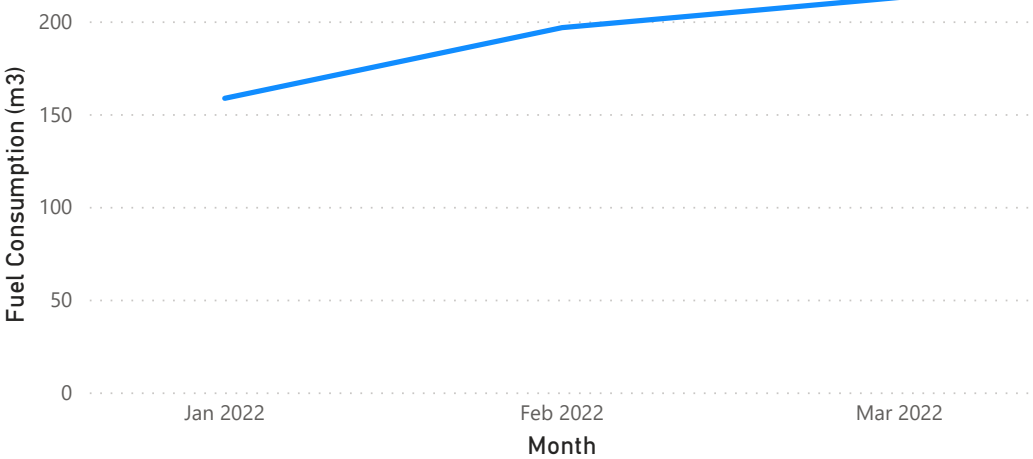
Warami - AHTS

Best Practices and recommendations

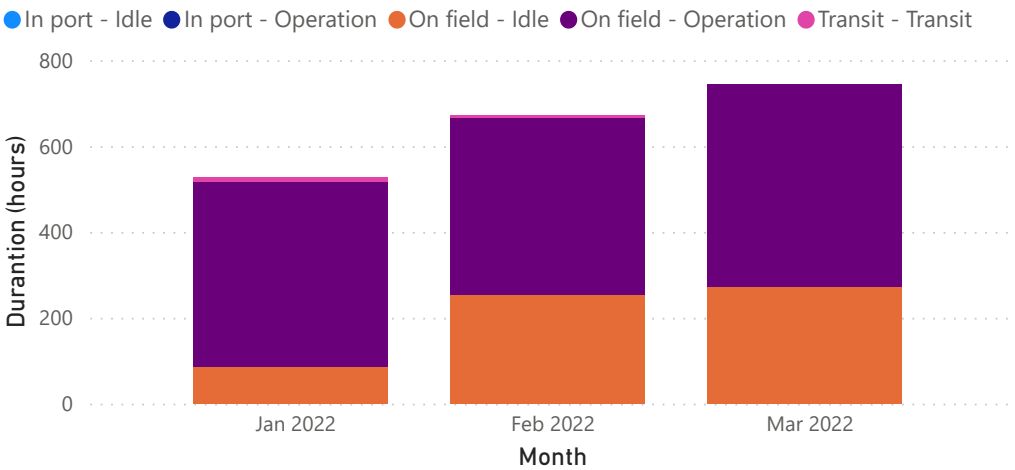
Vessel does a lot of safety stand-by at buoy.
Best practice applied in Stand-by

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Oct 2021			0,00			
Nov 2021			0,00			
Dec 2021			0,00			
Jan 2022	158,50	4,89	28,67	1,61	4,50	48,00
Feb 2022	196,60	1,31	72,34	1,51	7,00	45,38
Mar 2022	212,90	0,00	83,39	1,45		0,00
Total	568,00	6,20	184,40	1,51	5,45	93,38

Monthly Fuel Consumption



Operational Profile



Warami

Stand-By on Field

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Jan 2022	3,45	17,31	1,21	85,05
Feb 2022	0,97	59,35	1,01	252,42
Mar 2022	0,00	67,08	0,97	272,33
Total	4,42	143,74	1,02	609,80

Operational Stand-by

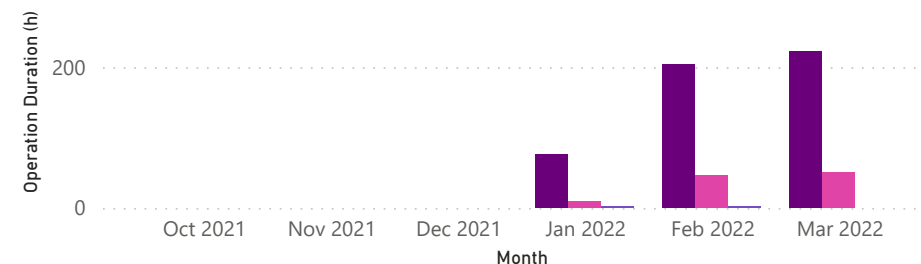
Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Oct 2021		0,00		
Nov 2021		0,00		
Dec 2021		0,00		
Jan 2022		11,34		
Feb 2022	0,34	13,08	2,00	2,25
Mar 2022		16,31		
Total	0,34	40,72	2,00	2,25

Transit

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Jan 2022	1,44	0,03	2,00	4,50	48,00	10,67
Feb 2022	0,00	-0,10	2,00	7,00	45,38	6,50
Total	1,44	-0,07	2,00	5,45	93,38	17,17

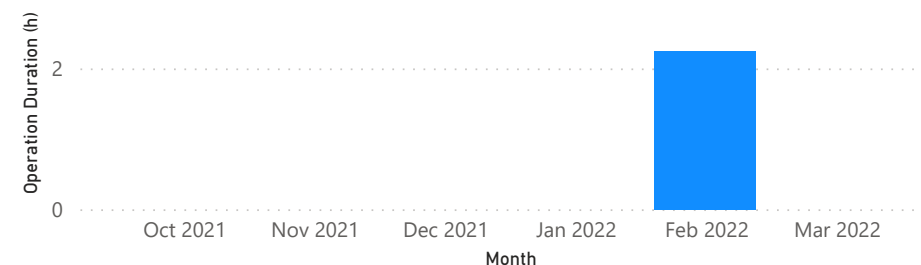
Stand-By Type

Stand By Type ● At buoy ● Drifting with minimum power ● In DP



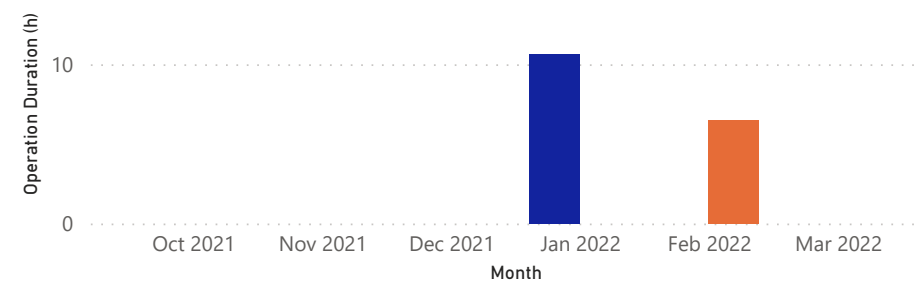
Operational Stand-by per location

Location ● BONGA FPSO



Speed Distribution in transit

Speed Range ● ≤ 6 knts ● 6 - 7 knts



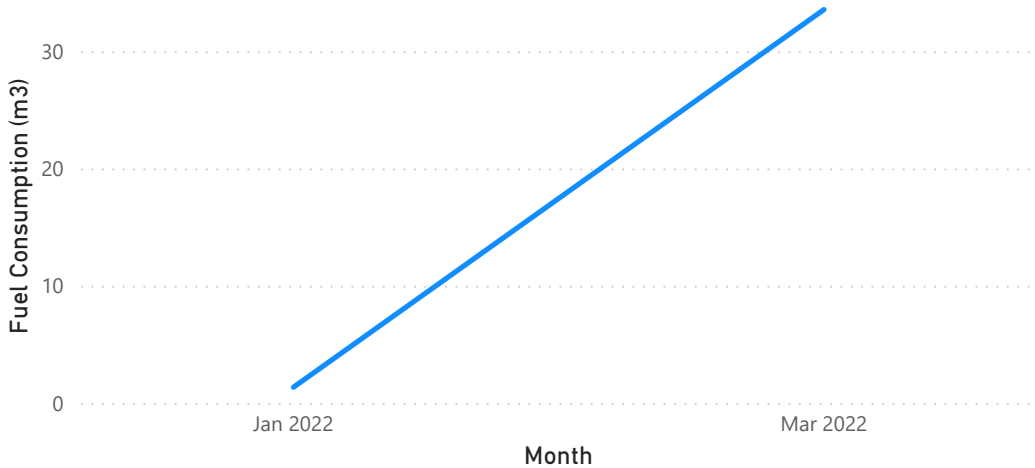
Viva 2 - Crew Supply Vessel

Best Practices and recommendations

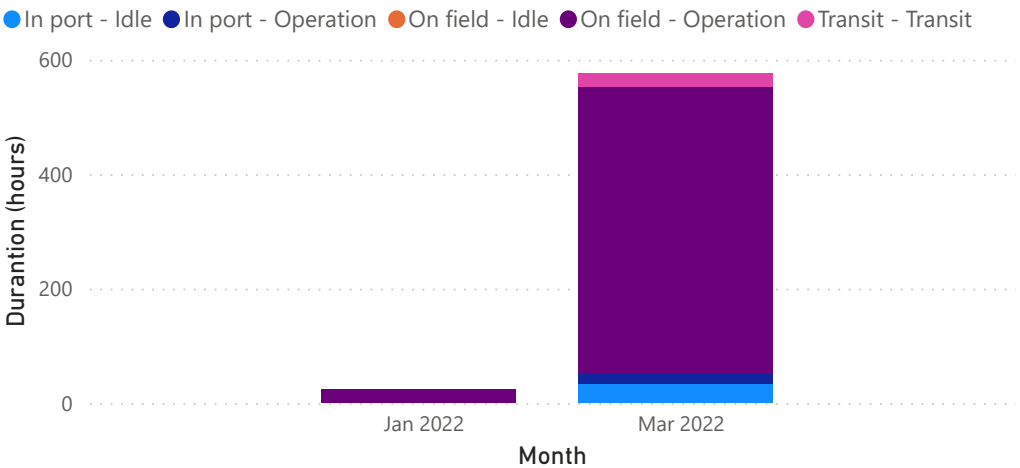
Vessel start reporting and she is in screening period

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Jan 2022	1,35	0,00		2,00	5,00	119,92
Mar 2022	33,58	0,00		1,86	6,06	3 174,18
Total	34,92	0,00		1,86	6,01	3 294,10

Monthly Fuel Consumption



Operational Profile



Viva 2

Stand-By on Field

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Mar 2022	0,00		2,00	0,75
Total	0,00		2,00	0,75

Operational Stand-by

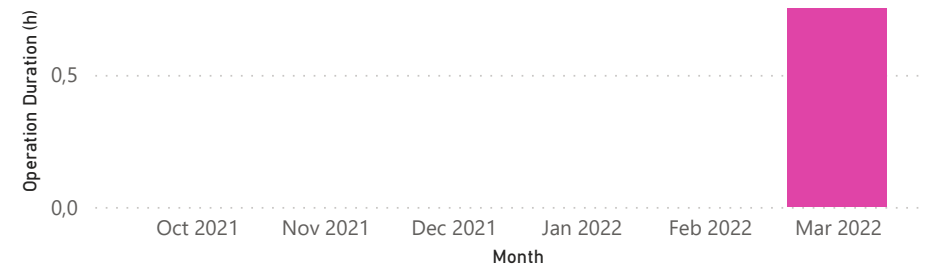
Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
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Transit & Patrol

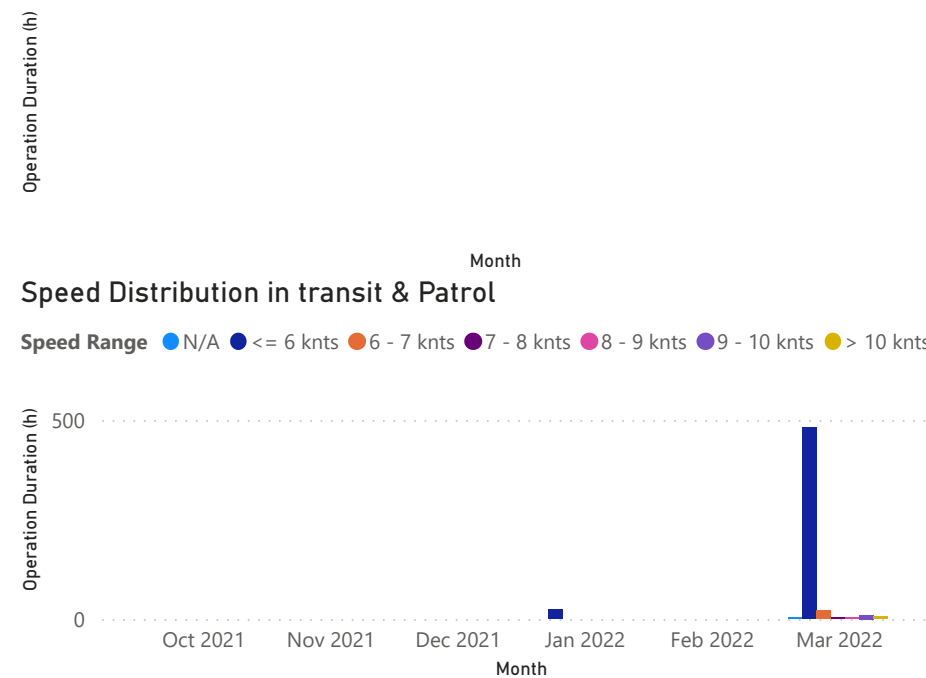
Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Jan 2022	0,00		2,00	5,00	119,92	24,00
Mar 2022	0,00		2,04	6,06	3 174,18	524,83
Total	0,00		2,04	6,01	3 294,10	548,83

Stand-By Type

Stand By Type ● Drifting with minimum power

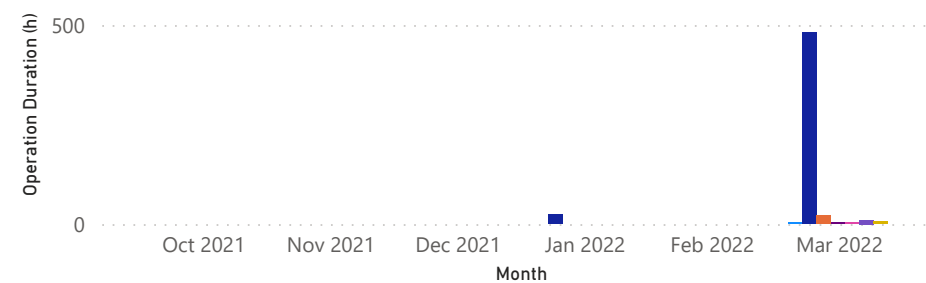


Operational Stand-by per location



Speed Distribution in transit & Patrol

Speed Range ● N/A ● ≤ 6 knts ● 6 - 7 knts ● 7 - 8 knts ● 8 - 9 knts ● 9 - 10 knts ● > 10 knts



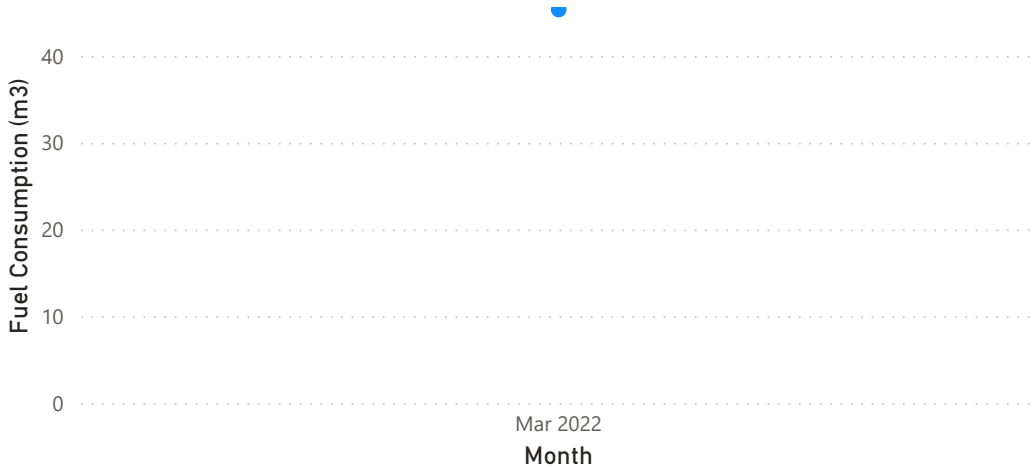
Atima II - FSIV

Best Practices and recommendations

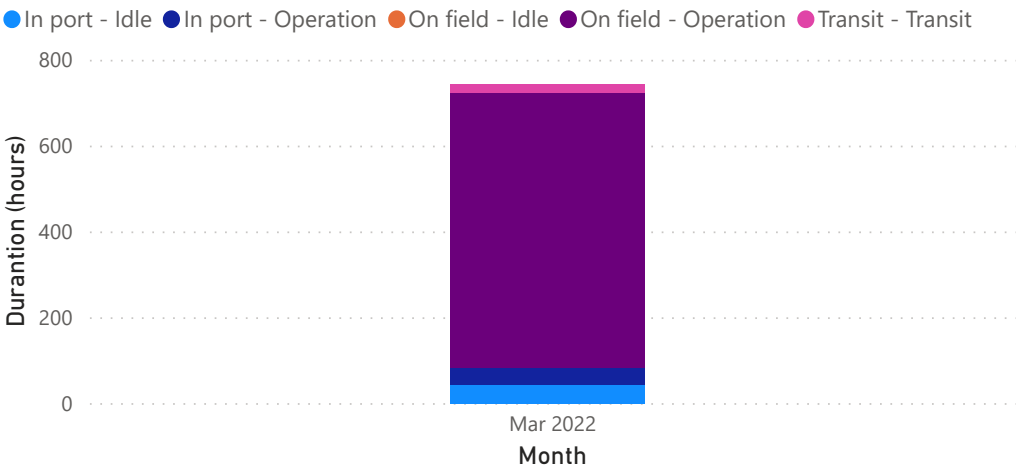
Vessel start reporting and she is in screening period

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Mar 2022	45,35	0,47		1,20	5,15	3 401,65
Total	45,35	0,47		1,20	5,15	3 401,65

Monthly Fuel Consumption



Operational Profile



Atima II

Stand-By
on Field

Month Fuel Potential Savings (m3) Fuel impact (m3) Avg Main Engine Used Operation Duration (h)

Operational
Stand-by

Month Fuel Potential Savings (m3) Fuel impact (m3) Avg Main Engine Used Operation Duration (h)

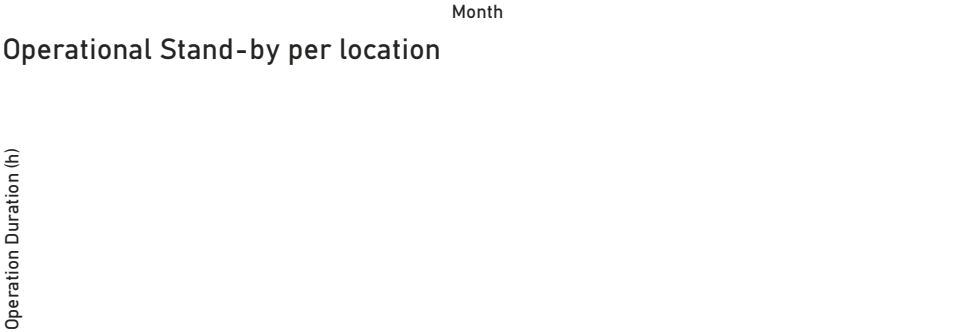
Transit &
Patrol

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Mar 2022	0,00		1,21	5,15	3 401,65	661,08
Total	0,00		1,21	5,15	3 401,65	661,08

Stand-By Type

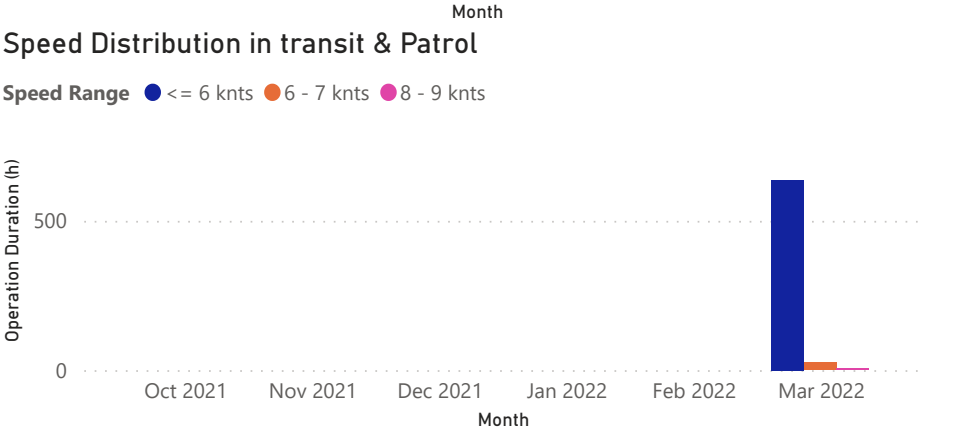


Operational Stand-by per location



Speed Distribution in transit & Patrol

Speed Range ● ≤ 6 knts ● 6 - 7 knts ● 8 - 9 knts



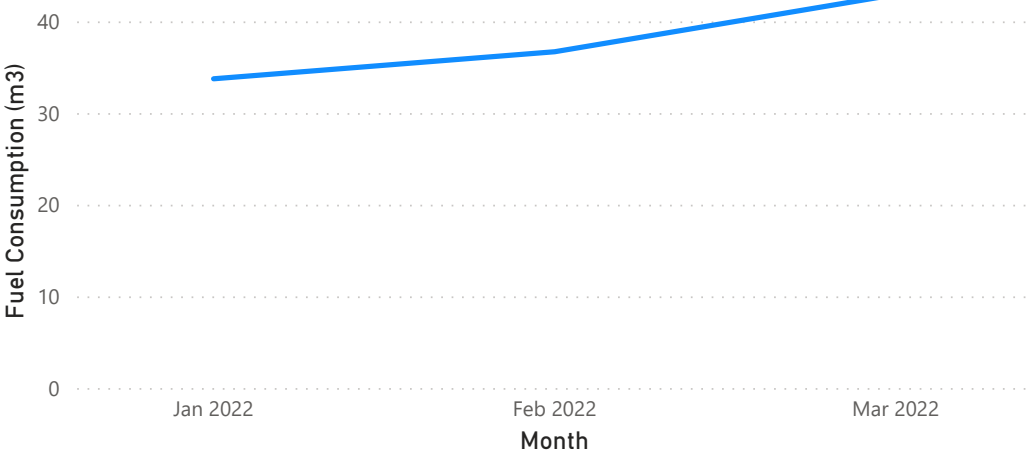
Emmanuella IV - FSIV

Best Practices and recommendations

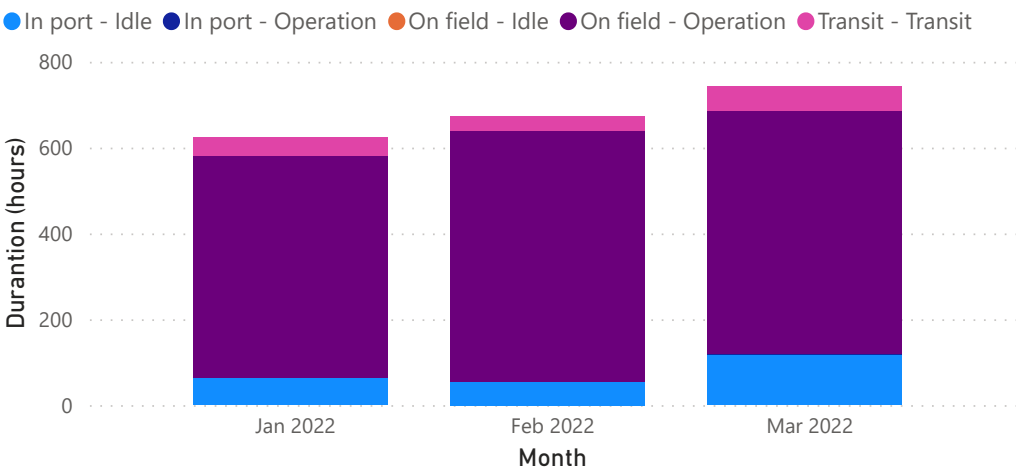
Vessel start reporting and she is in screening period

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Jan 2022	33,74	1,56		2,62	6,68	3 300,80
Feb 2022	36,69	1,18		2,77	7,00	4 306,42
Mar 2022	42,93	1,83		2,35	7,09	4 425,91
Total	113,36	4,57		2,57	6,94	12 033,12

Monthly Fuel Consumption



Operational Profile



Emmanuella IV

Stand-By
on Field

Month Fuel Potential Savings (m3) Fuel impact (m3) Avg Main Engine Used Operation Duration (h)

Operational
Stand-by

Month Fuel Potential Savings (m3) Fuel impact (m3) Avg Main Engine Used Operation Duration (h)

Transit &
Patrol

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Jan 2022	1,56		2,79	6,68	3 300,80	559,50
Feb 2022	1,18		2,90	7,00	4 306,42	616,25
Mar 2022	1,83		2,54	7,09	4 425,91	624,50
Total	4,57		2,74	6,94	12 033,12	1 800,25

Stand-By Type

Operation Duration (h)

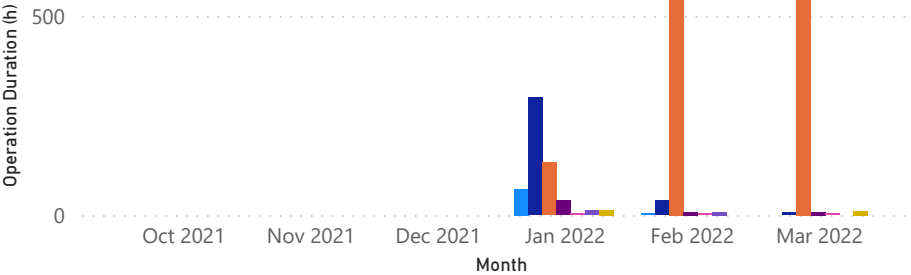
Operational Stand-by per location

Operation Duration (h)

Speed Distribution in transit & Patrol

Speed Range N/A <= 6 knts 6 - 7 knts 7 - 8 knts 8 - 9 knts 9 - 10 knts > 10 knts

Operation Duration (h)



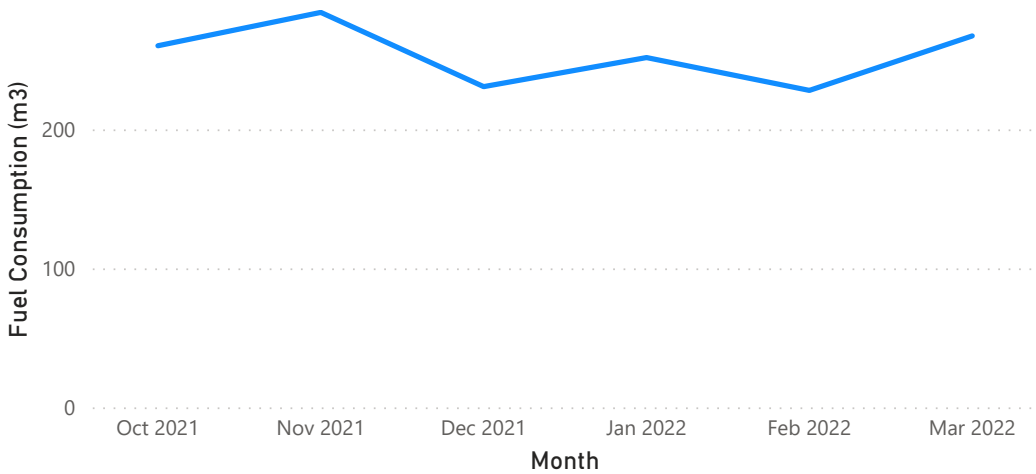
A100 - PSV

Best Practices and recommendations

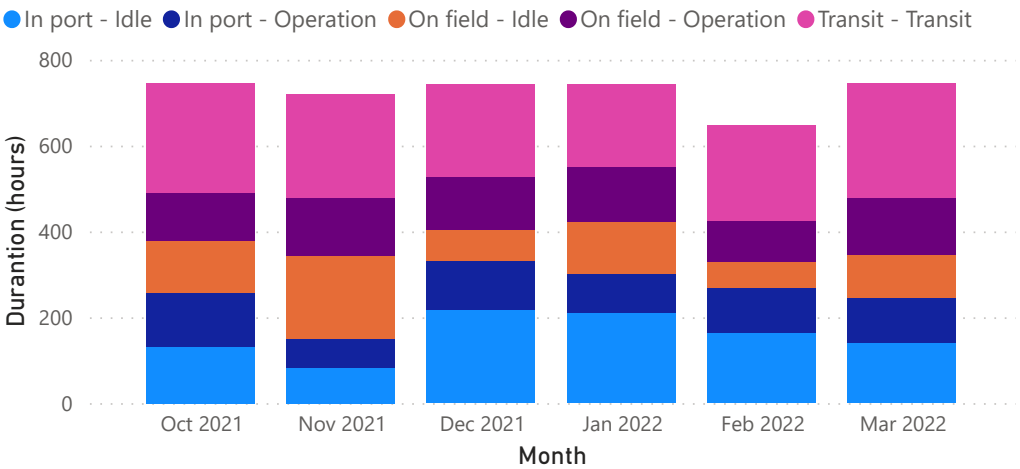
Increase of the use of Stand-by in DP and number of engine used in Operational Stand-by

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Oct 2021	260,20	7,81	34,82	2,16	7,45	1 893,26
Nov 2021	284,20	5,91	35,35	2,34	7,54	1 823,06
Dec 2021	230,78	9,49	39,25	2,00	6,87	1 475,01
Jan 2022	251,70	12,51	31,04	2,08	7,05	1 360,24
Feb 2022	228,07	13,40	34,42	2,08	6,79	1 507,53
Mar 2022	267,26	23,67	32,04	2,19	6,80	1 805,56
Total	1 522,20	72,79	206,92	2,14	7,09	9 864,65

Monthly Fuel Consumption



Operational Profile



A100

Stand-By on Field

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Oct 2021	0,00	1,30	2,03	119,80
Nov 2021	0,00	5,18	2,05	194,23
Dec 2021	0,00	1,26	2,16	69,93
Jan 2022	0,00	1,19	2,10	117,73
Feb 2022	1,12	1,40	2,12	55,33
Mar 2022	3,49	1,00	2,06	89,67
Total	4,61	11,33	2,07	646,69

Operational Stand-by

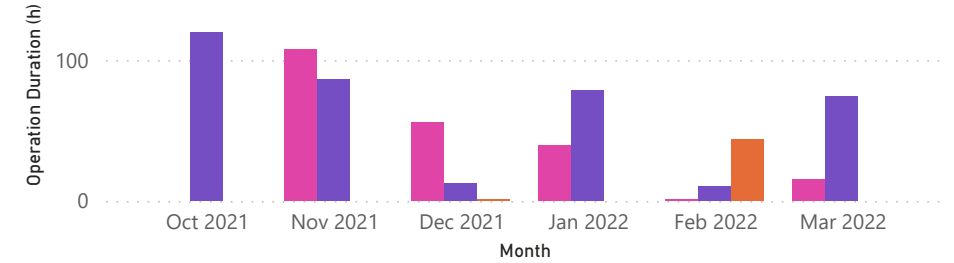
Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Oct 2021		2,13		
Nov 2021		2,95		
Dec 2021		1,86		
Jan 2022	0,17	2,22	2,00	1,42
Feb 2022	0,77	1,03	2,21	5,67
Mar 2022	1,85	1,36	3,00	10,00
Total	2,79	11,55	2,65	17,09

Transit

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Oct 2021	7,81	21,39	2,99	7,45	1 893,26	254,17
Nov 2021	5,78	21,20	2,99	7,54	1 823,06	242,07
Dec 2021	9,49	20,38	2,83	6,87	1 475,01	215,34
Jan 2022	10,97	14,15	2,98	7,05	1 360,24	193,00
Feb 2022	11,51	19,90	2,92	6,79	1 507,53	222,20
Mar 2022	17,89	19,57	2,85	6,80	1 805,56	265,73
Total	63,44	116,59	2,93	7,09	9 864,65	1 392,50

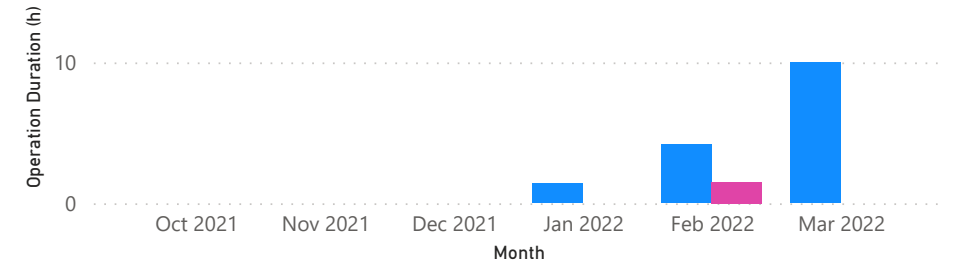
Stand-By Type

Stand By Type ● Drifting with minimum power ● In DP ● Very Slow steaming



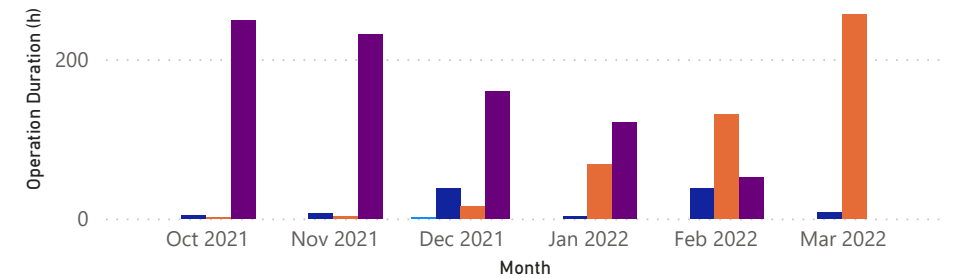
Operational Stand-by per location

Location ● BONGA FPSO ● Q7000



Speed Distribution in transit

Speed Range ● N/A ● <= 6 knts ● 6 - 7 knts ● 7 - 8 knts



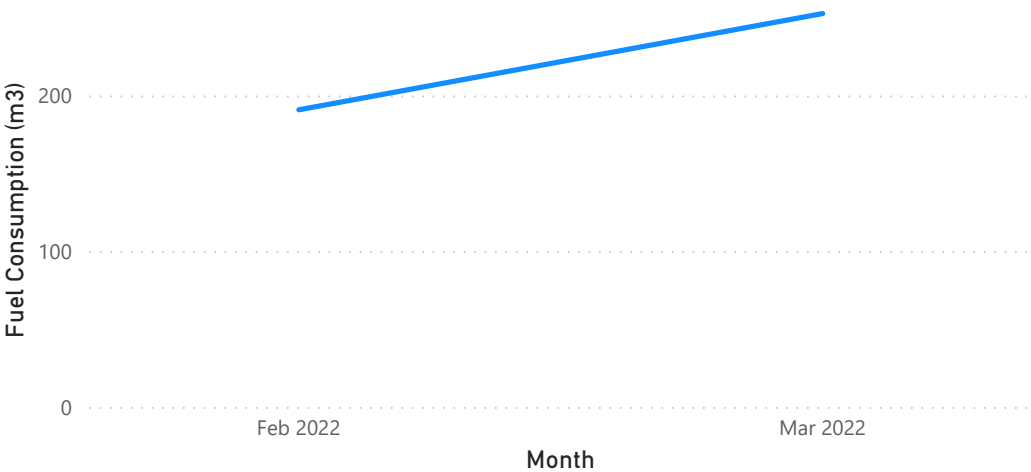
Bemigho - PSV

Best Practices and recommendations

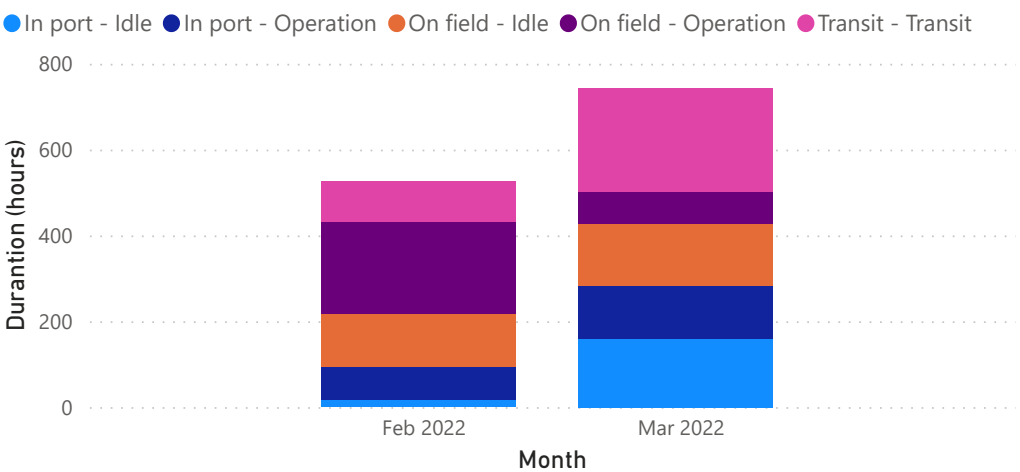
Vessel started challenge period. Best practices have been communicated to the vessel.

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Feb 2022	190,88	15,72		1,83	6,96	664,58
Mar 2022	252,68	26,24	0,21	1,73	7,18	1 729,58
Total	443,56	41,96	0,21	1,77	7,12	2 394,15

Monthly Fuel Consumption



Operational Profile



Bemigho

Stand-By on Field

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Feb 2022	10,00		1,96	95,00
Mar 2022	15,11	0,03	2,05	123,57
Total	25,12	0,03	2,01	218,57

Operational Stand-by

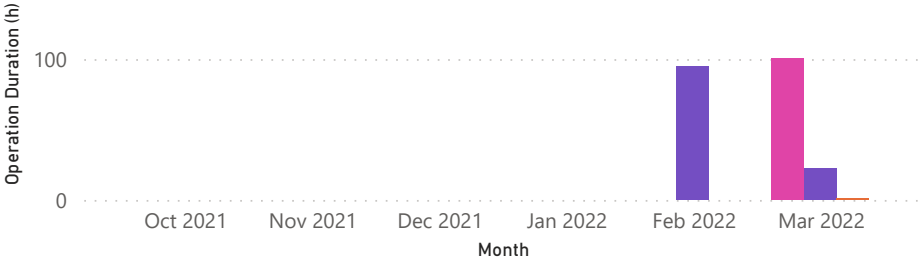
Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Feb 2022	1,89		2,00	27,25
Mar 2022	1,54	-0,16	2,41	20,97
Total	3,43	-0,16	2,18	48,22

Transit

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Feb 2022	3,80		1,99	6,96	664,58	95,48
Mar 2022	8,87	0,15	2,00	7,18	1 729,58	241,00
Total	12,68	0,15	2,00	7,12	2 394,15	336,48

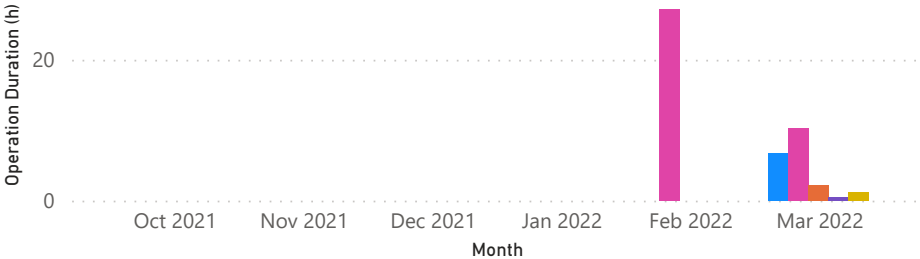
Stand-By Type

Stand By Type ■ Drifting with minimum power ■ In DP ■ Very Slow steaming



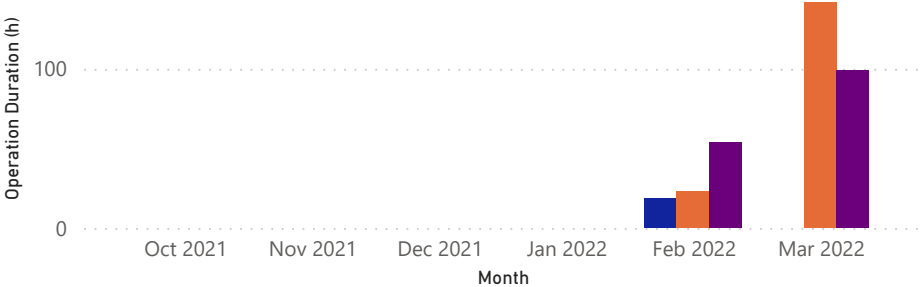
Operational Stand-by per location

Location ■ BONGA FPSO ■ Q7000 ■ SEA EAGLE EA DPA ■ SEA EAGLE EA DPJ ■ Warami



Speed Distribution in transit

Speed Range ■ <= 6 knts ■ 6 - 7 knts ■ 7 - 8 knts



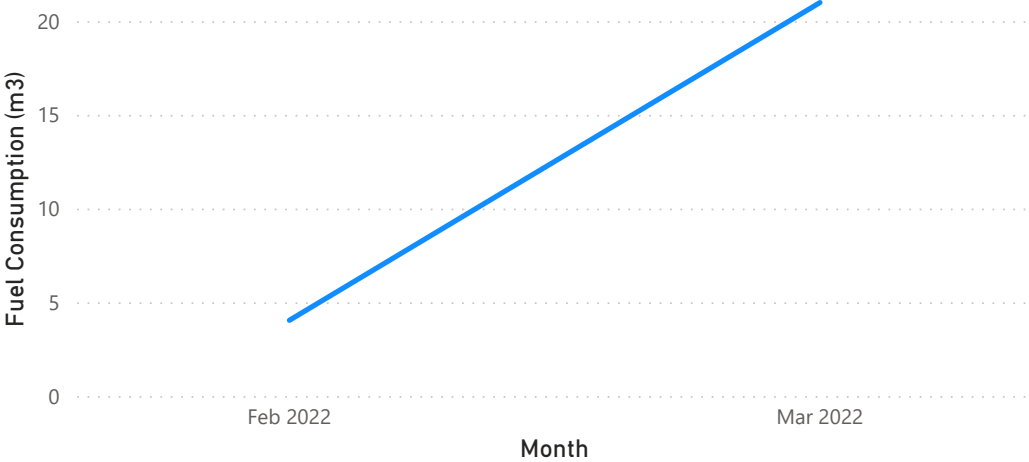
Guardian 11 - Securitty Vessel

Best Practices and recommendations

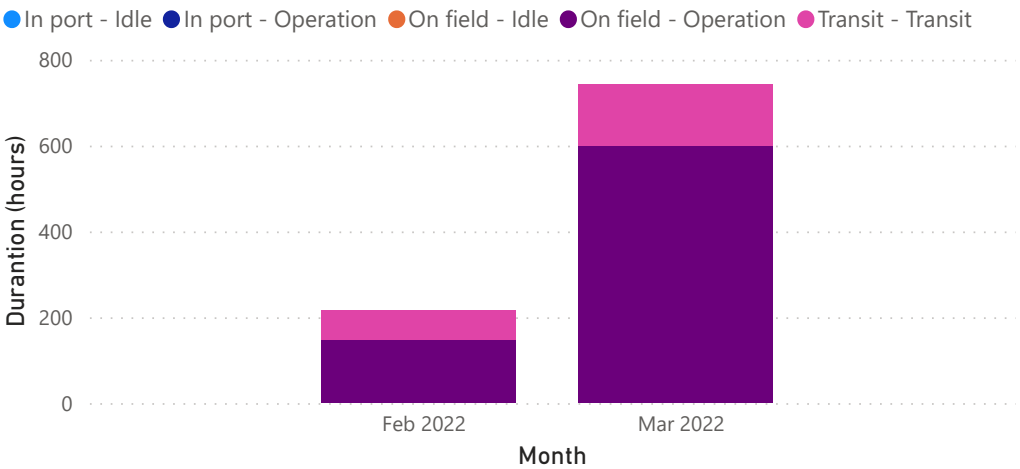
Vessel started reporting and is in screening period

Month	Fuel Consumption (m3)	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Feb 2022	4,04	0,00		1,11	3,93	753,72
Mar 2022	20,99	0,00		1,32	5,40	647,55
Total	25,03	0,00		1,28	4,49	1 401,27

Monthly Fuel Consumption



Operational Profile



Guardian 11

Stand-By
on Field

Month Fuel Potential Savings (m3) Fuel impact (m3) Avg Main Engine Used Operation Duration (h)

Operational
Stand-by

Month Fuel Potential Savings (m3) Fuel impact (m3) Avg Main Engine Used Operation Duration (h)

Transit &
Patrol

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Feb 2022	0,00		1,11	3,93	753,72	216,00
Mar 2022	0,00		1,32	5,40	647,55	744,00
Total	0,00		1,28	4,49	1 401,27	960,00

Stand-By Type

Operation Duration (h)

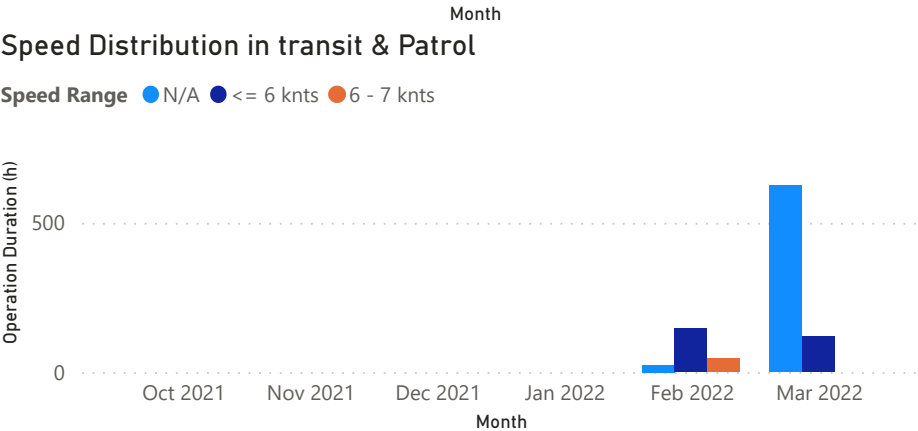
Operational Stand-by per location

Operation Duration (h)

Speed Distribution in transit & Patrol

Speed Range N/A <= 6 knts 6 - 7 knts

Operation Duration (h)



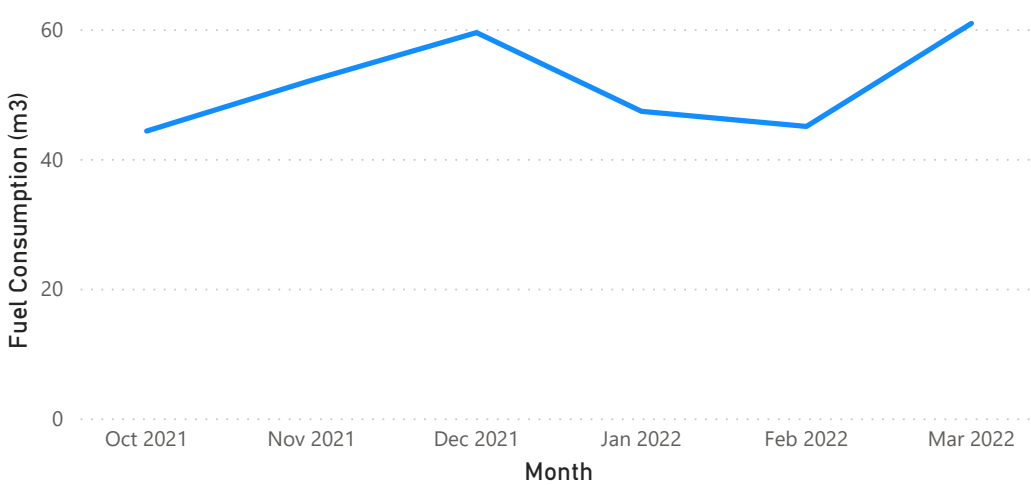
SVS Avery - Security Vessel

Best Practices and recommendations

Vessel does not a lot of challenged activities.
Vessel increased her speed and time in transit, but spend more time in port.

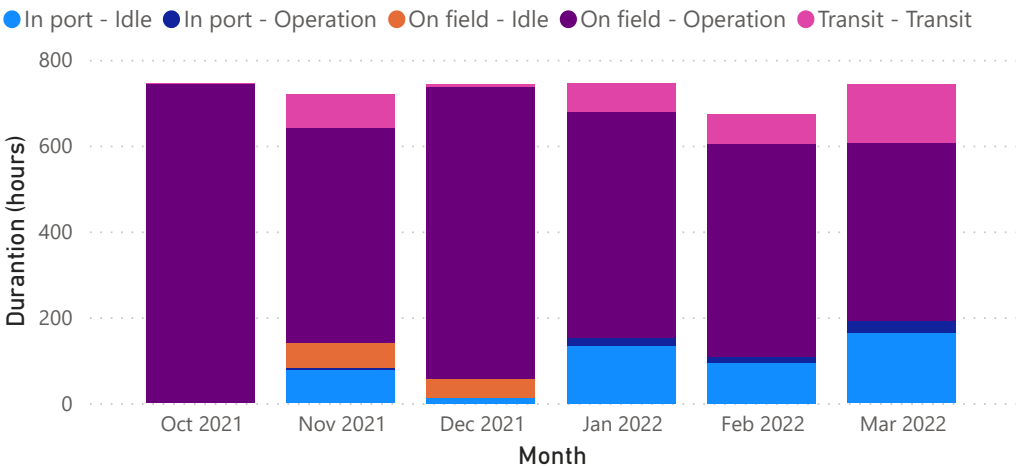
Month	Fuel Consumption (m3)	Fuel impact (m3)	Fuel Potential Savings (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)
Oct 2021	44,31	0,00	0,00	1,98	5,40	3 847,18
Nov 2021	52,13	-0,49	0,00	1,89	6,49	3 704,59
Dec 2021	59,49	0,04	0,00	2,25	5,84	3 945,49
Jan 2022	47,35	1,33	0,00	1,59	5,22	3 065,34
Feb 2022	45,02	0,81	1,41	1,75	5,11	2 863,52
Mar 2022	60,91	0,16	0,66	1,10	5,00	2 756,23
Total	309,20	1,85	2,07	1,76	5,52	20 182,36

Monthly Fuel Consumption



< >

Operational Profile



SVS Avery

Stand-By on Field

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Nov 2021	0,00	-0,51	0,75	59,00
Dec 2021	0,00	0,03	0,00	45,00
Total	0,00	-0,48	0,42	104,00

Operational Stand-by

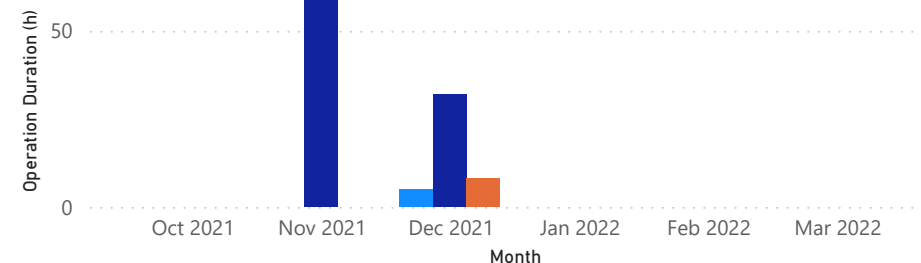
Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Operation Duration (h)
Oct 2021		0,00		
Nov 2021		0,00		
Dec 2021		0,00		
Jan 2022		0,00		
Feb 2022		0,00		
Mar 2022		0,00		
Total		0,00		

Transit & Patrol

Month	Fuel Potential Savings (m3)	Fuel impact (m3)	Avg Main Engine Used	Avg Speed (kn)	Distance Sailed (NM)	Operation Duration (h)
Oct 2021	0,00	0,00	1,98	5,40	3 847,18	744,00
Nov 2021	0,00	-0,49	1,90	6,49	3 704,59	638,00
Dec 2021	0,00	0,04	2,29	5,84	3 945,49	732,25
Jan 2022	0,00	1,33	1,96	5,22	3 065,34	591,50
Feb 2022	0,00	0,81	1,96	5,11	2 863,52	562,93
Mar 2022	0,00	0,16	1,40	5,00	2 756,23	551,38
Total	0,00	1,85	1,94	5,52	20 182,36	3 820,07

Stand-By Type

Stand By Type ● At anchorage ● Other ● Very Slow steaming



Operational Stand-by per location

Operation Duration (h)

Month

Speed Distribution in transit & Patrol

Speed Range ● N/A ● <= 6 knts ● 6 - 7 knts ● 7 - 8 knts ● 8 - 9 knts ● 9 - 10 knts ● > 10 knts

