



NATIONAL JOINT-STOCK COMPANY
NAFTOGAZ
OF UKRAINE

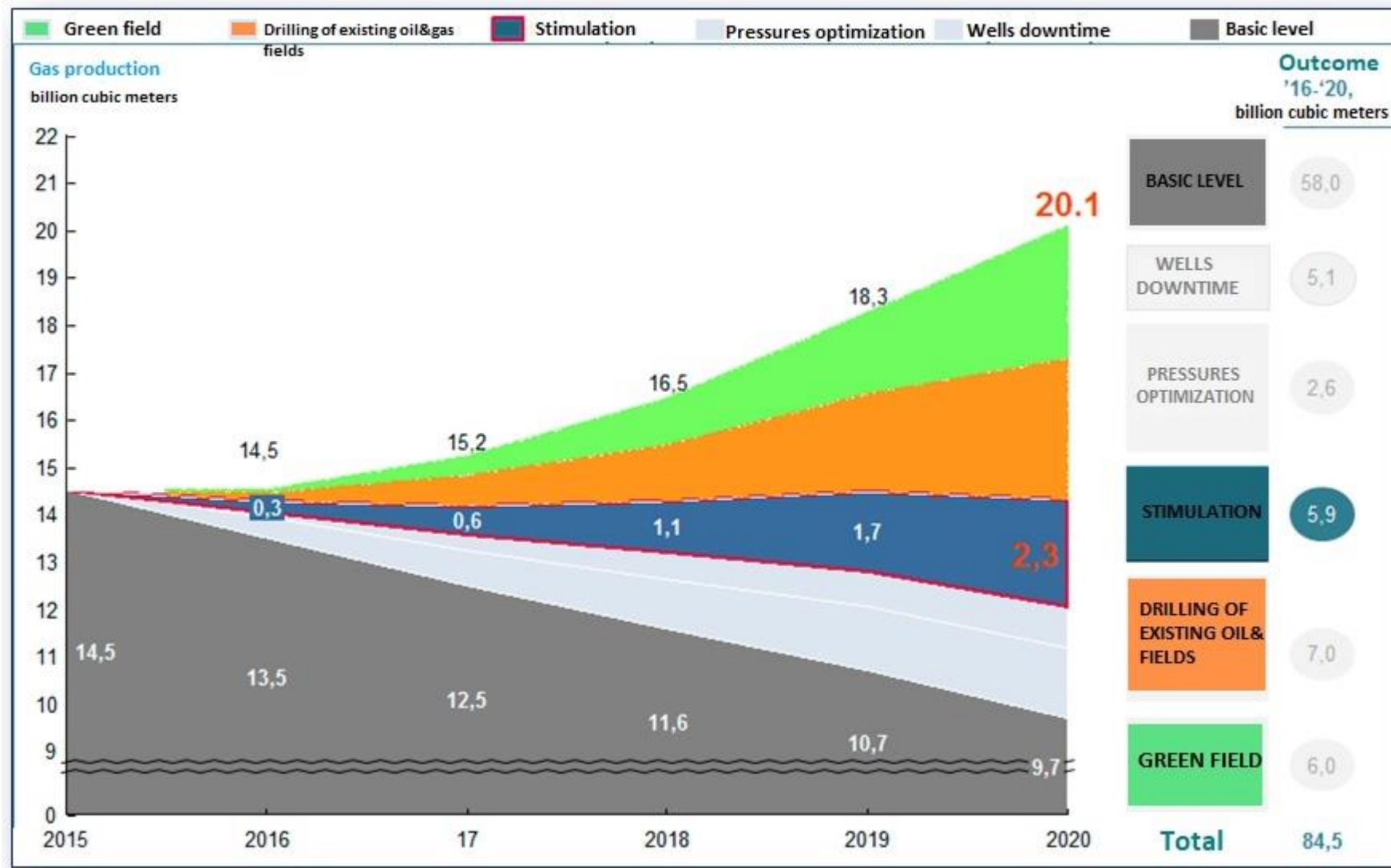
STRATEGY 20/20

GAS PRODUCTION 20 bcm BY 2020

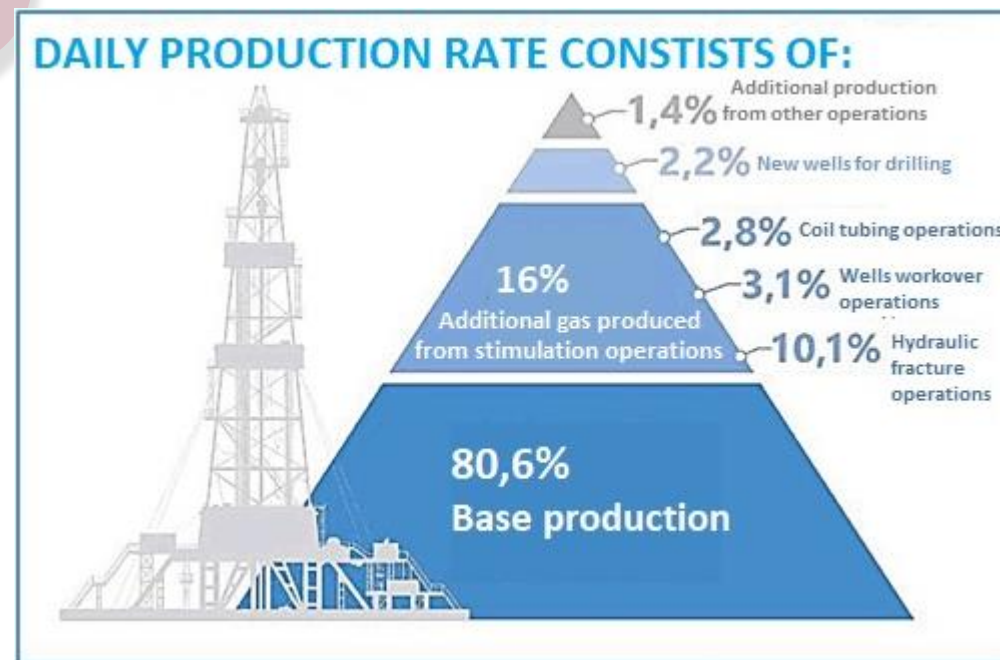
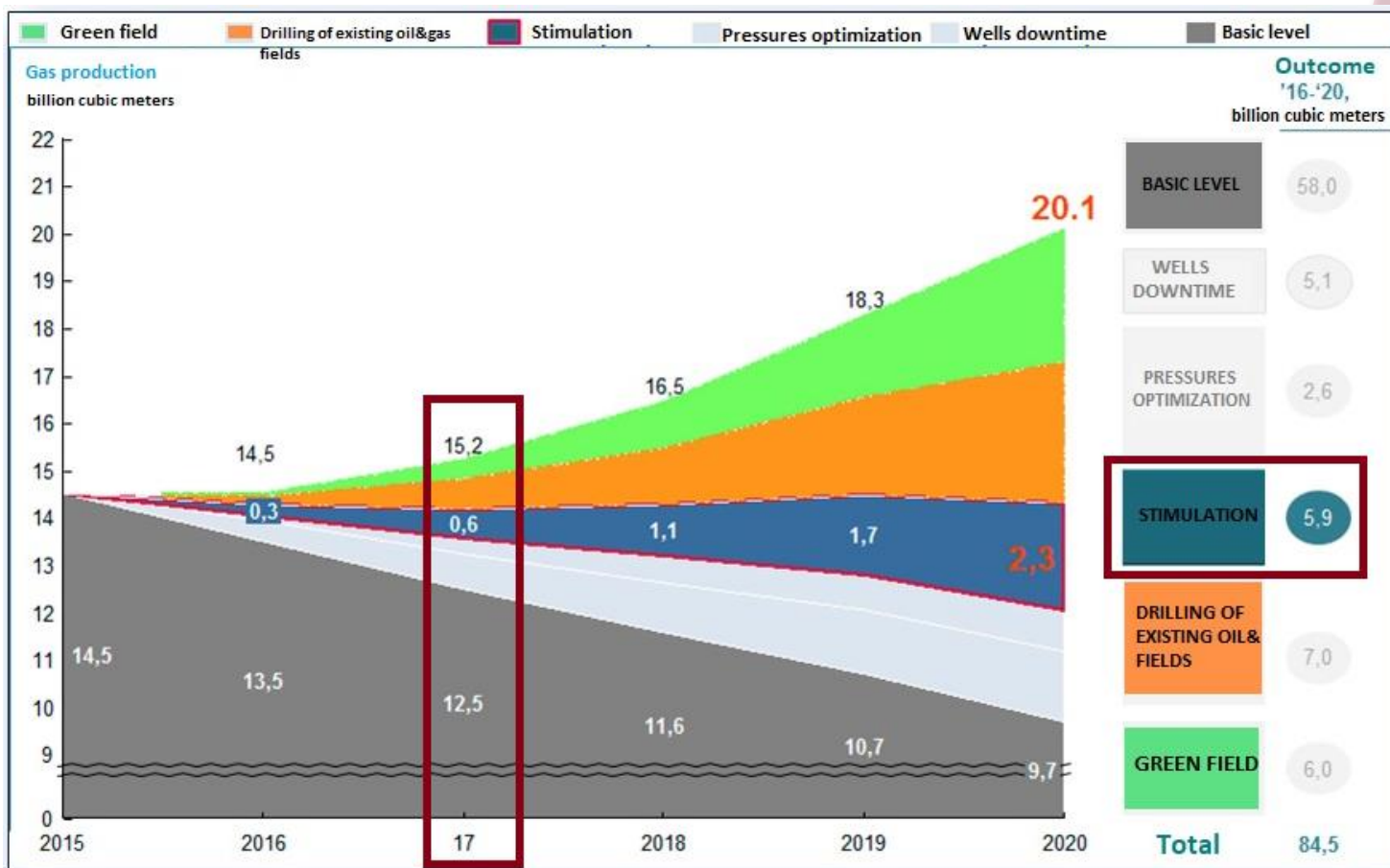
OIL AND GAS SERVICE 2018

- KYIV
- DECEMBER, 2017
- NAGORNIAK YURIY

THE ROLE OF THE GAS & OIL SERVICE IN STRATEGY 20/20

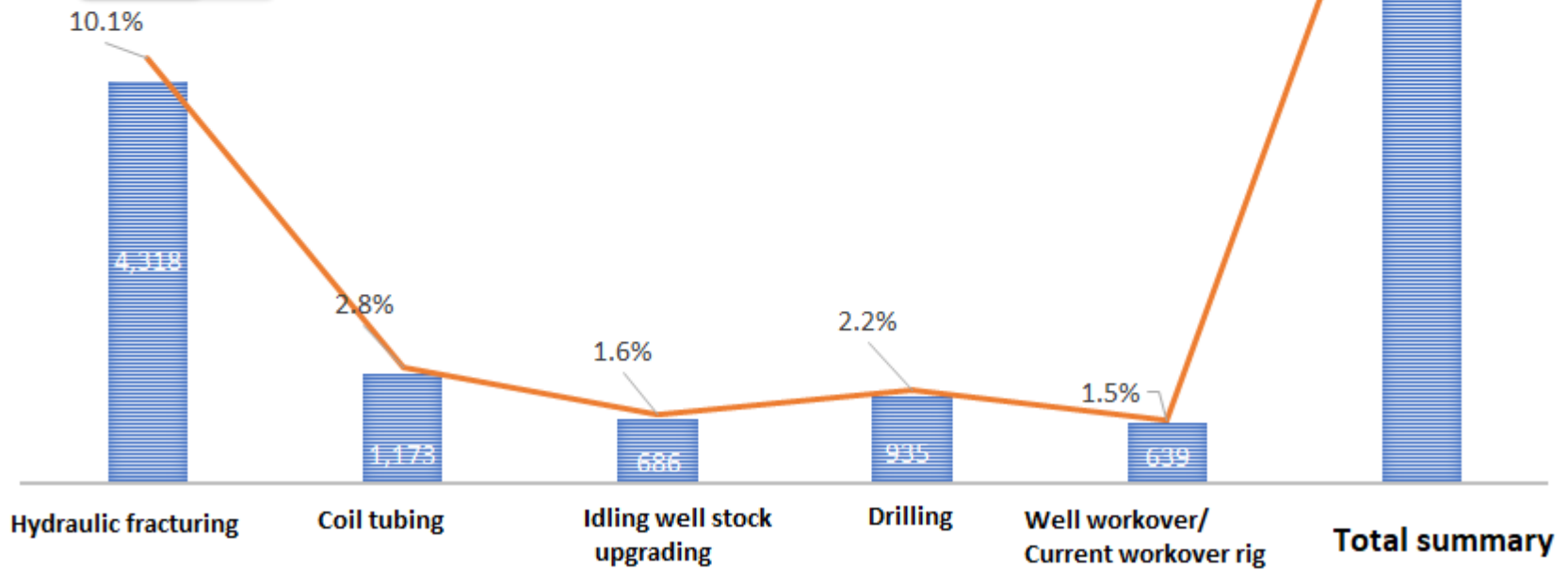
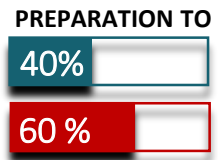
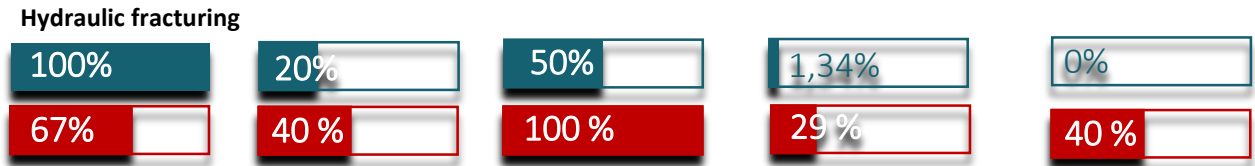


PRELIMINARY SUMMARY 2017

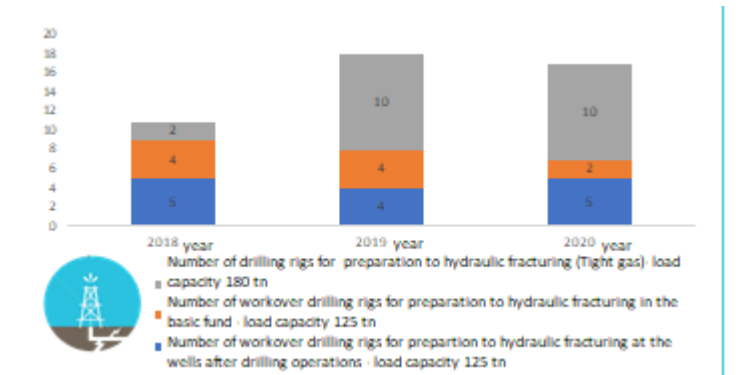
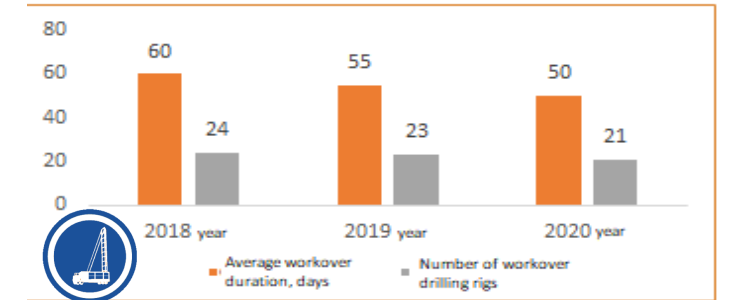
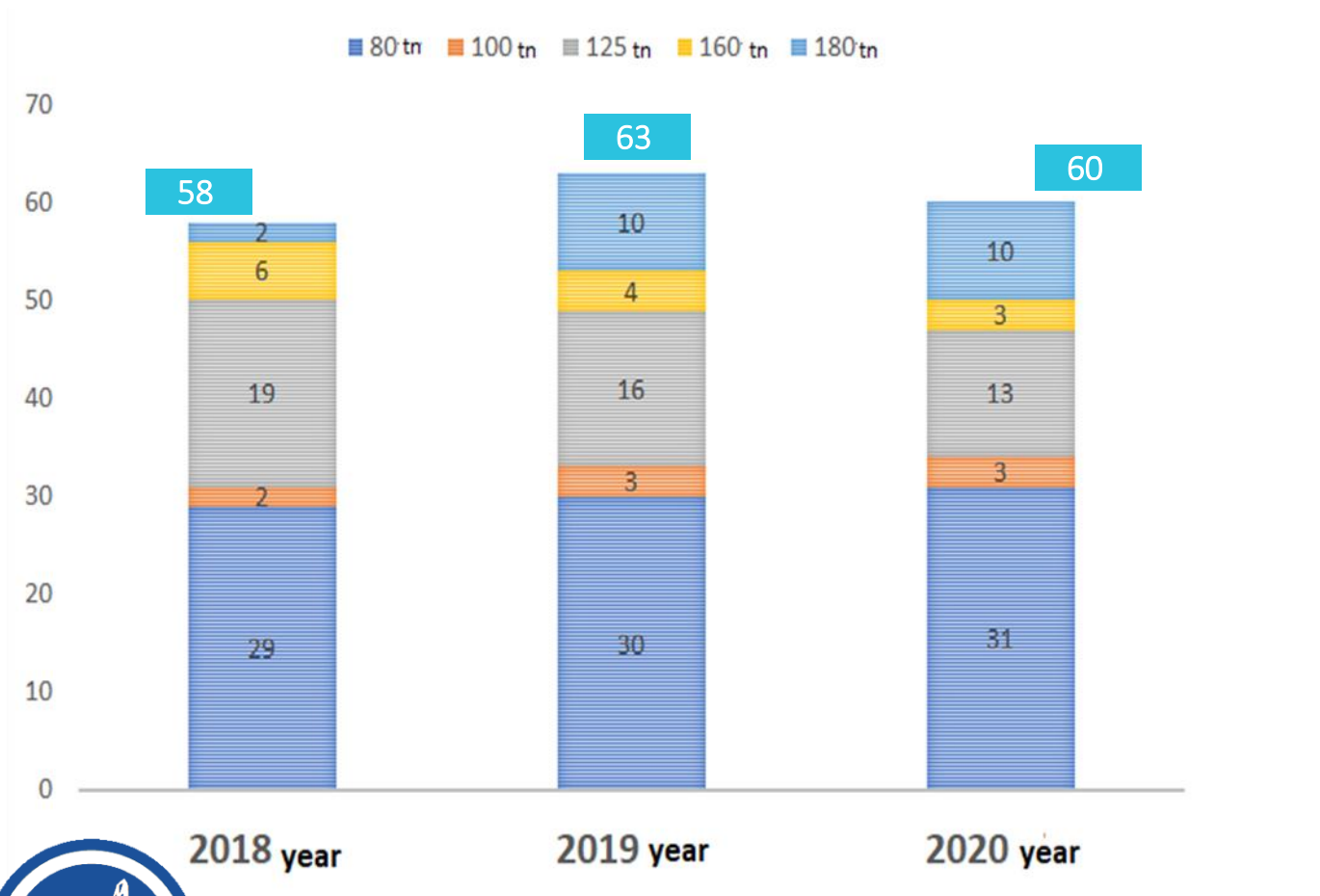


BALANCE OF OUTSOURCING CONTRACTOR vs DOMESTIC CONTRACTOR

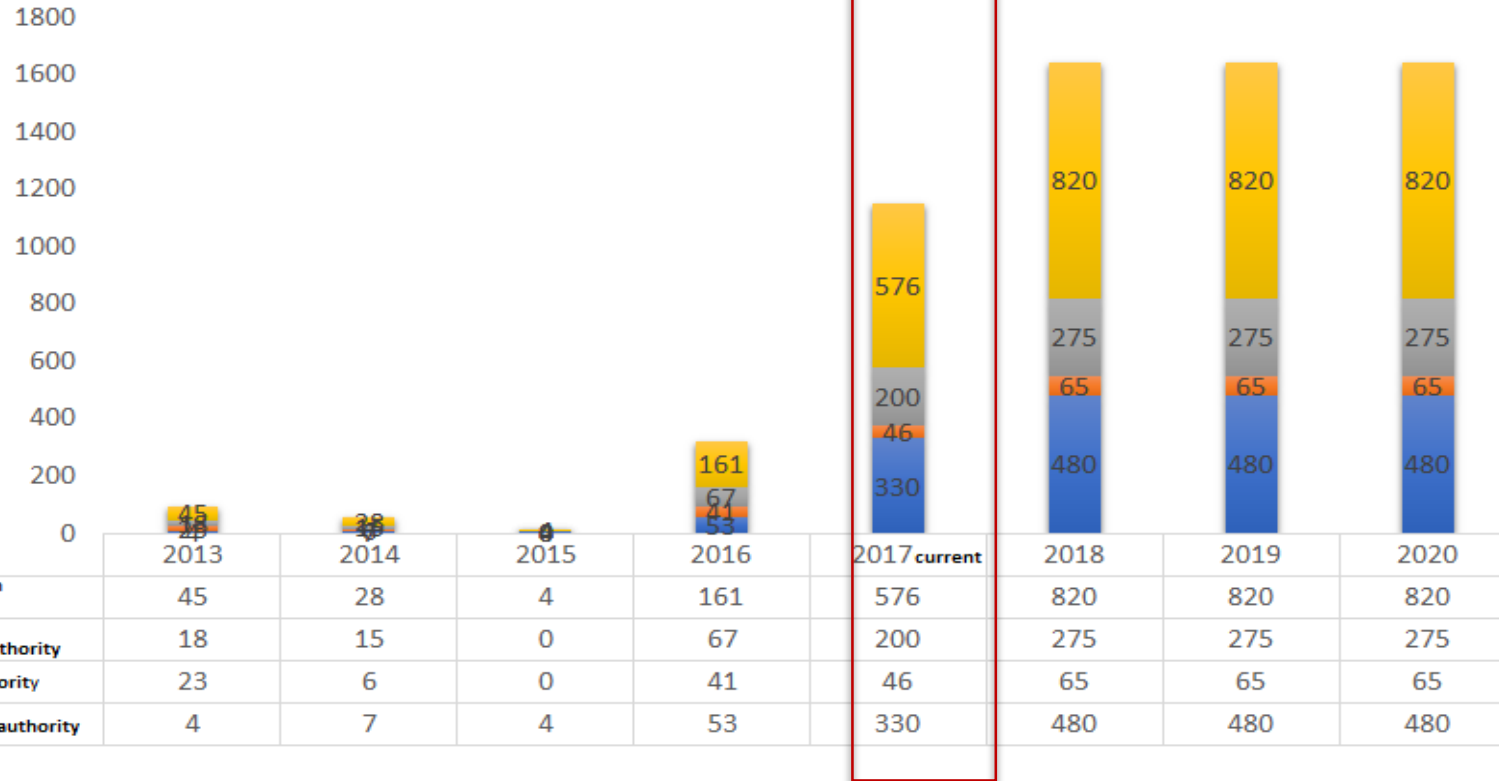
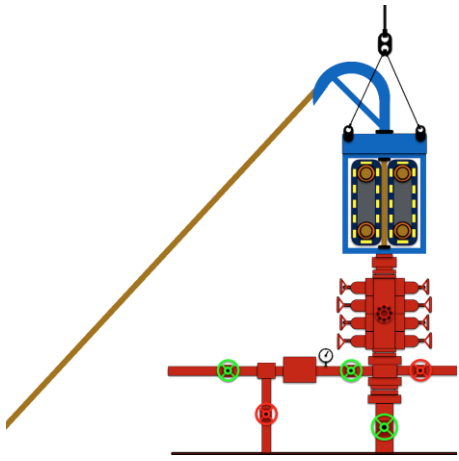
2017
2018



REQUIRED NUMBER OF WORKOVER DRILLING RIGS IN 2018-2020



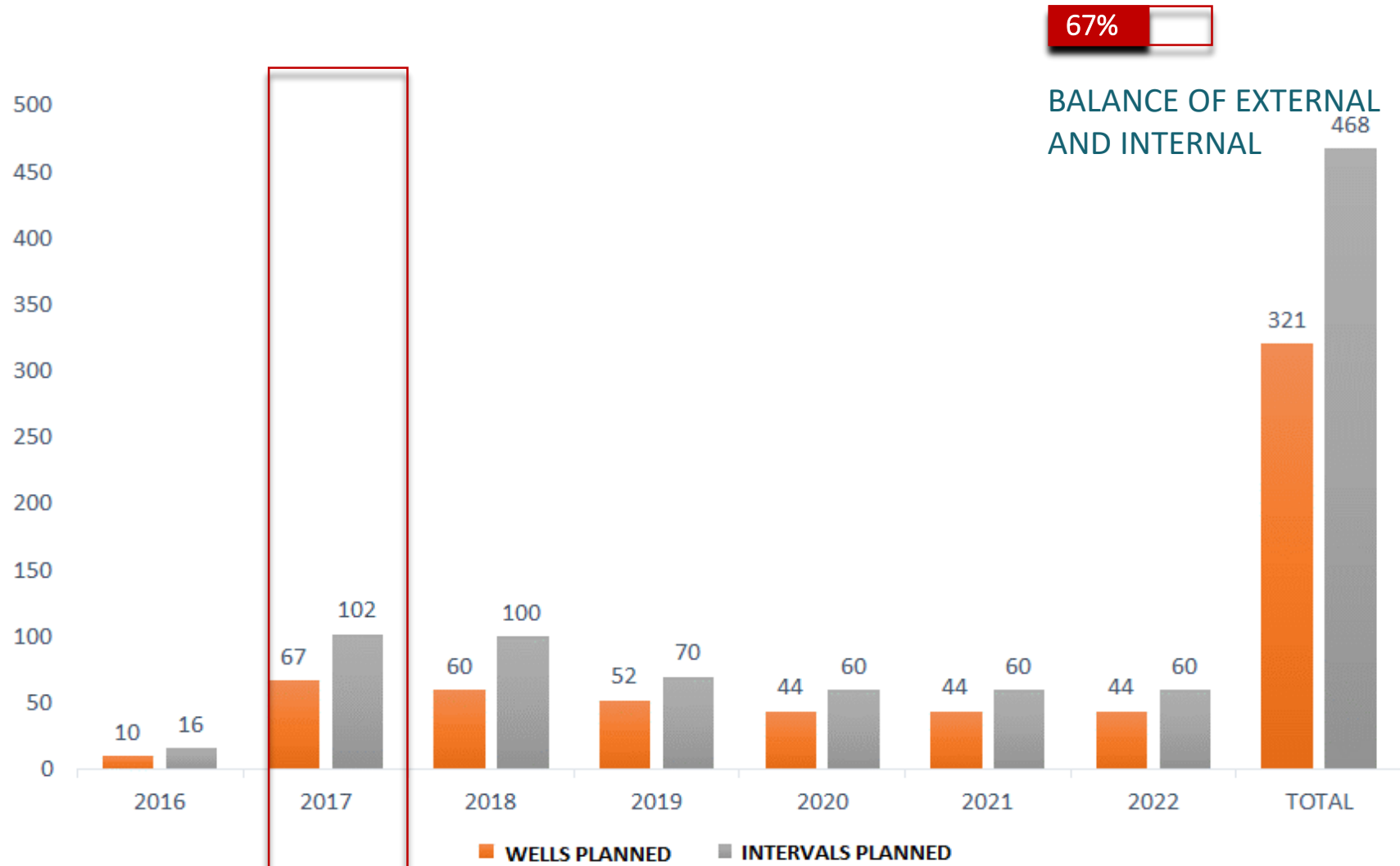
DEMANDS IN COIL TUBING FLEET IN 2018-2020



■	Number of operations in Industrial gas authority
■	Poltavske Industrial gas authority
■	Lvivske Industrial gas authority
■	Shebelinskaya Industrial gas authority

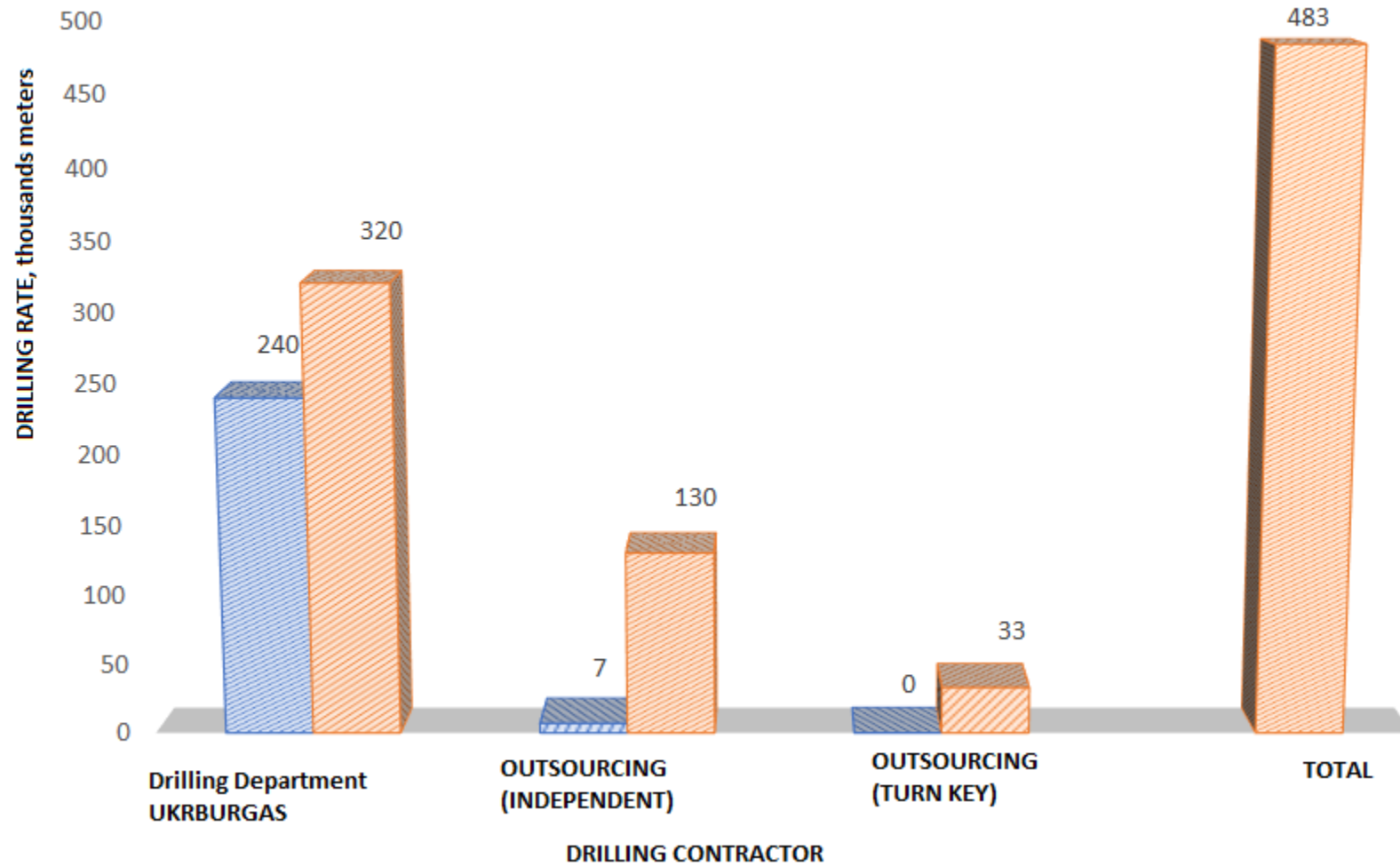


DEMANDS IN HYDROFRAC FLEET






DRILLING SCHEDULE 2017 vs 2018

2017 2018

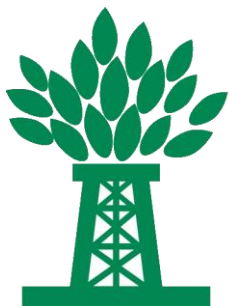


WORKOVER 2018

NAME OF SERVICES/GOODS	UNIT OF MEASURE	DESCRIPTION
SERVICES		
Workover drilling rigs, 60/80MT...180 MT	300 wells; up to 80 drilling rigs of the Outsourcing Contractors	  
PREPARATION OF DRILLING AND WELL-KILLING FLUIDS	WELLS	OPERATIONS SUPPORT, UP TO 300 WELLS
SIDETRACKING "TURNKEY"	WELLS	OFF-STREAM WELLS REACTIVATION TURNKEY PROJECT, UP TO 20 WELLS
FIELDWORK OUTSOURCING SUPERVISING SERVICES	WORKOVER DRILLING RIGS	SIMULTANEOUS OPERATIONS ON 80 DRILLING RIGS
TRANSPORTATION SERVICES FOR "UGV-SERVICE" FILIATION	N/A	FREIGHT TRANSPORT AND LIFTING MACHINES
WELLS TESTING	UNIT	UNIT OF EQUIPMENT, 24 WELLS
GOODS		
MOBILE DRILLING RIGS 125MT AND 180MT	125MT X10 180MT X5	SUPPLY OF NEW MOBILE DRILLING RIGS
DRILLING PIPES	4 000 TONNES	73/89MM S-135 / G-105 GRADE
FREIGHT TRANSPORT AND PASSENGER CAR TRAFFIC	N/A	FREIGHT TRANSPORT AND PASSENGER CAR TRAFFIC FOR PERSONAL USE
FIELD CAMPS COMPLEXES FOR THE WORKOVER TEAMS	UNIT	36 UNITS FOR THE OWN WORKOVER DRILLING RIGS SUPPORT
WORKOVER DOWN HOLE EQUIPMENT	N/A	FISHING TOOLS, MILLING AND IMPACT TOOLS



DRILLING SERVICES 2018



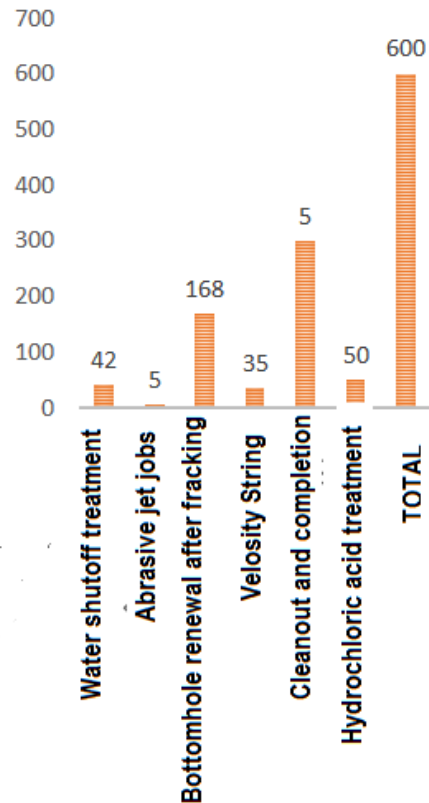
#	NAME OF SERVICES RENDERED AND GOODS PROVIDED	UNIT OF MEASURE	2018	2019	2020
1	SERVICES OF A DRILLING CONTRACTOR ON DAY RATE PAYMENT	DRILLING RIG	7	10	13
2	SERVICCES OF A DRILLING CONTRACTOR ON "TURNKEY"	DRILLING RIG	7	10	13
3	SERVICES PROVISION ON SLUDGE TANKS AND PIT S WATERPROOF INSULATION	SITES	72	107	131
4	DIRECTIONAL DRILLING SERVICES	WELLS	20	30	37
5	DRILLING FLUIDS SERVICES PROVISION	WELLS	45	67	82
6	DRILLING WASTE MOVING OUT FROM THE SITE AND ITS DISPOSAL	WELLS	8	12	15
7	WELLS CEMENT JOBS SERVICES	WELLS	40	60	73
8	SERVICES PROVISION ON ENGINEERING SUPPORT OF THE ACCESSORY CASING EQUIPMENT	WELLS	32	48	58
9	CASING AND LINERS SERVICES PROVISION WITH A LEAKPROOF EQUIPMENT OF THE WELL LINING IN SECTION AND HANGERS USE	WELLS	32	48	58
10	DRILLING BITS SERVICES AND ENGINEERING SUPPORT	WELLS	45	67	82
11	DOWNHOLE DRILLING MOTORS SERVICES PROVISION AND ENGINEERING SUPPORT	WELLS	45	67	82
12	DRILLING JARS SERVICES PROVISION AND ENGINEERING SUPPORT	WELLS	45	67	82
13	GEOPHYSICAL SURVEY AND PERFORATION SHOOTING JOBS IN THE WELLS	WELLS	32	48	58
14	CORE RECOVERY SERVICES	WELLS	8	12	15
15	MWD , MUD LOGGING STATION SERVICES	WELLS	9	13	16
16	FISHING TOOLS SERVICES PROVISIONG AND LEASING	UAH, THOUSANDS	9 000	13 410	16 380
17	PACKER EQUIPMENT, WIRELINE OPERATIONS AND FISHING TOOLS SERVICES PROVISION	UAH, THOUSANDS	9 000	13 410	16 380
18	DRILLING FLUIDS TREATMENT AND PURIFICATION SERVICES	WELLS	8	12	15

HYDRAULIC FRACTURING 2018



NAME OF SERVICES/GOODS	UNIT OF MEASURE	DESCRIPTION
SERVICES		
HYDRAULIC FRACTURING OPERATIONS	80 OPERATIONS ON WELLS	HYDRAULIC FRACTURING OPERATIONS PERFORMANCE ON GAS-CONDENSATE WELLS
	2 LOTS (50 AND 30 OPERATIONS)	
GOODS		
PROPPANT AGENT IN THE RANGE	2000 TONNES	PROPPANT– HYDRAULIC FRACTURES PROPPING AGENT
		CERAMIC PROPPANT AND RCP PROPPANT PURCHASE IS PLANNED
CHEMICAL AGENTS FOR LINER AND CROSSLINKED GEL FOR HYDRAULIC FRACTURING	1200 M3 LINER GEL	CHEMICAL AGENTS PURCHASE IS PLANNED FOR POSSIBLE PREPARATION OF THE DRILLING FLUIDS SPECIFIED VOLUME
	5000 M3 CROSSLINKED GEL	
SPECIAL-PURPOSE MACHINERY FOR THE HYDRAULIC FRACTURING UNIT (10 UNITS FOR FRACKING)	1 PROPPANT TANK CARRIER WITH CAPACITY MORE THAN 60 TONNES	ADDITIONAL SUPPLY OF MISSING UNITS A SPECIAL MACHINERY FOR FRACKING PURCHASE OF THE SPECIFIED SPECIAL MACHINERY UNITS IS PLANNED
	3 PUMPS 2500 horse powers each	
	6 TANKS FOR FRACKING FLUID WITH VOLUME M ³	
PACKERS	10 SERVICE PACKERS	PACKERS FOR OPERATION UNDER PRESSURE 700 ATM FOR USING IN CASINGS 140, 146, 168 MM.
	4 SERVICE PACKERS	

COIL TUBING SERVICES 2018



PROCUREMENT PLAN		
SERVICES		
WORKOVER OPERATIONS WITH A COIL TUBING UNIT USE	510 OPERATIONS AT THE WELLS	OPERATIONS WITH COMPRESSION UNIT ON GAS-CONDENSATE WELLS
	5 LOTS (22 OPERATIONS)	
	5 LOTS (80 OPERATIONS)	
GOODS		
RESERVOIR GAS	14900T	FOR COMPLETION AND WELLS CLEANOUT USE
COILED TUBING IN STOCK	18 COILS OF TUBING	FOR OPERATIONS WITH COMPRESSION UNITS USE
SPECIAL-PURPOSE MACHINERY FOR COMPRESSION UNIT:	NITROGEN PUMP COMPLEX UNIT 5 UNITS;	FOR COMPLETION AND WELLS CLEANOUT USE
	SERVICE VEHICLE 2 UNITS;	
	CRIOGENIC TANKS ON A MOTOR VEHICLE CHASSIS 5 UNITS	
BOP	BOP 2 UNITS FOR COIL TUBING 31,75MM	FOR COMPRESSION UNIT UPGRADE
	BOP 2 UNITS FOR COIL TUBING 38,1MM	
BOREHOLE TOOLS FOR COMPRESSION UNIT	DOWNHOLE DRILLING MOTOR IN A STOCK FOR COMPRESSION UNIT (4 UNITS)	FOR BOREHOLE JOBS WITH COMPRESSION UNIT USE
	PERCUSSION IN STOCK (UNIT) FOR COIL TUBING	
SPARE PARTS IN A STOCK	FOR COMPRESSION UNIT, NITROGEN UNIT, PUMPING UNIT AND SPECIAL-PURPOSE MACHINERY	FOR SERVICE MAINTENANCE OF THE COIL TUBING UNITS