

2020 企业社会责任报告





报告规范

报告说明

为便于表达和阅读,在报告中"中国船舶集团有限公司"分别使用"中国船舶集团"、"集 团公司"和"我们"等称谓。

报告范围

本报告覆盖中国船舶集团有限公司及成员单位在经济、环境、社会等方面的工作成效。 报告时间范围为 2020 年 1 月 1 日至 2020 年 12 月 31 日,部分内容追溯以往年份。

编写标准及可靠性保障

国务院国资委《关于中央企业履行社会责任的指导意见》(国资发研究〔2008〕1号) 国务院国资委《关于国有企业更好履行社会责任的指导意见》(国资发研究(2016)105号) 国家标准化管理委员会《社会责任报告编写指南》(GB/T36001-2015) 中国社会科学院《中国企业社会责任报告编写指南(CASS-CSR4.0)》 全球报告倡议组织(GRI)《可持续发展报告指南》(GRI-standards) 国际标准化组织《ISO 26000 社会责任指南(2010)》 联合国 2030 可持续发展目标(SDGs) 各项指标在本报告中的披露情况可参考报告末尾的指标索引。 集团公司保证报告信息的真实性和准确性。

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习近平致"奋斗者"号全海深载人潜水器 成功完成万米海试并胜利返航的贺信

值此"奋斗者"号全海深载人潜水器成功完成万米海试 并胜利返航之际, 谨向你们致以热烈的祝贺! 向所有致力于 深海装备研发、深渊科学研究的科研工作者致以诚挚的问候! "奋斗者"号研制及海试的成功,标志着我国具有了进 入世界海洋最深处开展科学探索和研究的能力,体现了我国 在海洋高技术领域的综合实力。从"蛟龙"号、"深海勇士" 号到今天的"奋斗者"号,你们以严谨科学的态度和自立自 强的勇气, 践行"严谨求实、团结协作、拼搏奉献、勇攀高峰" 的中国载人深潜精神,为科技创新树立了典范。希望你们继 续弘扬科学精神,勇攀深海科技高峰,为加快建设海洋强国、 为实现中华民族伟大复兴的中国梦而努力奋斗,为人类认识、 保护、开发海洋不断作出新的更大贡献!



习近平致信祝贺"奋斗者"号全海深载人潜水器成功完成万米海试并胜利返航

2020年11月28日, "奋斗者"号全海深载人潜水器成功完成万米海试并胜利返航。 中共中央总书记、国家主席、中央军委主席习近平发来贺信,致以热烈的祝贺,向所有致 力于深海装备研发、深渊科学研究的科研工作者致以诚挚的问候。

习近平 2020年11月28日

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董事长、党组书记 **雷凡培** 2020年,是中国船舶集团在严峻复杂形势下深化整合融合、加快创新发展极不平凡的一年。 一年来,我们以习近平总书记重要指示为根本遵循,胸怀"两个大局",心怀"国之大者",制定 并实施高质量发展战略,统筹疫情防控和科研经营生产,发挥党建优势,聚力兴装强军,壮大主业 实业,强化创新驱动,集团公司责任使命更加聚焦,整体实力更加突出,经营业绩持续改善,建设 世界一流船舶集团迈出了坚实的一步。

我们牢记强军首责,坚持战斗力标准,完善舰船装备研制体系,创新装备研制模式,加强军品 质量管理,按期优质完成了包括两栖攻击舰、大型驱逐舰在内的各项装备研制任务,有力支撑了世 界一流海军建设。

我们聚焦主业实业,加快船海产业升级,大型邮轮入坞总装、2.3 万箱双燃料动力集装箱船批 量交付,新接船舶订单量、造船完工量、手持船舶订单量稳居世界第一;壮大科技应用产业,风电 产业增速加快、环境工程布局拓展;深化船海服务业转型调整,租赁、金融、物资采购等业务的价 值创造作用更加突出。

我们加快创新发展,"奋斗者"号全海深载人潜水器万米探海,面向海洋安全、深海科学研究 与资源开发等战略任务需要,策划、论证、实施了包括深海矿产资源开发、深远海养殖、海上 LNG 产业链、大型邮轮、船用低速机等一批重大创新工程,关键核心技术攻关持续推进。

我们深化改革调整,高效平稳完成总部机构改革,构建差异化管控模式,深入推进产业结构调整、能力布局优化和专业化实体化重组整合,亏损企业治理、"两非"剥离、企业剥离办社会职能等重大专项改革任务基本完成,市场化经营机制、混合所有制等重点领域改革取得重要突破。

我们强化精细化管理,启动对标世界一流管理提升三年行动,全面实施"成本工程",持续优 化资产负债结构,进一步加强"两金"压控;扎实推进"法治船舶"建设,开展纠纷案件"压存控 增",总部合规闭环管理基本形成,成员单位合规管理试点积极推进,审计和风险管理作用更加明显。

我们践行绿色发展理念,落实碳达峰、碳中和目标倡议,坚持绿色造船和造绿色船,持续发展 绿色产业。尽锐出战脱贫攻坚,助力云南省鹤庆县、勐腊县、丘北县脱贫摘帽,并持续巩固脱贫成 果。关爱员工发展,优质服务客户,参与社会公益事业,彰显了军工央企责任担当。

征途漫漫,惟有奋斗。2021年,是"十四五"开局之年,我们将坚持以习近平新时代中国特 色社会主义思想为指导,强化战略引领,打造原创技术策源地,勇当现代产业链链长,壮大主业实 业,强化精细化管理,努力提升质量效益,全面履行政治责任、经济责任和社会责任,发扬孺子牛、 拓荒牛、老黄牛精神,加快建设世界一流船舶集团,以优异成绩献礼建党100周年。

贯凡培



党组领导





雷凡培 党组书记、董事长

杨金成 党组副书记、董事、总经理



钱建平 党组成员、副总经理



孙 伟 党组成员、副总经理



姜仁锋 党组成员、副总经理





董事会成员

董事

外部董事



杜 刚 党组成员、副总经理



李佳颖 党组成员、纪检监察组组长

贾海英 党组成员、总会计师



盛纪纲 党组成员、副总经理





赵小刚 外部董事

燕 桦 外部董事







雷凡培 董事长



李建红



吴献东 外部董事



李树雷 外部董事



张英岱 职工董事

公司概况

中国船舶集团有限公司挂牌成立于 2019 年 11 月 26 日,是由原中国船舶工业集团有限公司、原中国船舶重工集团有限 公司联合重组成立的特大型中央企业,主要从事海洋防务装备产业、船舶海工装备产业、科技应用产业和船海服务业。

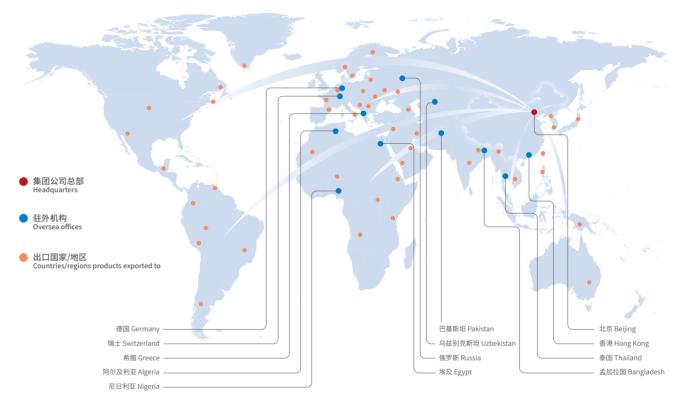
2020 年,中国船舶集团新接船舶订单量、造船完工量、手持船舶订单量全球占比分别为 23.3%、19.4%、21%,三大 造船指标均居世界第一。

2020 年,中国船舶集团实现营业收入 3232 亿元,利润总额 167 亿元,净利润 145 亿元;截至 2020 年底,资产总额 8614 亿元,用工总数 35.6 万余人,产品出口到全球 150 多个国家和地区,是世界第一造船集团。



组织架构

中国船舶集团党组,是经党中央批准设立的领导机构,讨论和决定重大事项,发挥把方向、管大局、促落实的领导作用。 中国船舶集团董事会,是决策机构,对国务院国资委负责,依法行使职权。中国船舶集团经理层,是执行机构,按照规 定执行董事会决议,开展生产经营工作。中国船舶集团纪检监察组,是经中央纪委国家监委批准设立的纪检监察机构, 依规依纪依法履行纪检、监察职能。中国船舶集团总部设立党组织工作机构3个和总部部门15个,集团公司旗下拥有 36家科研院所、10家上市公司,总计113家党组管理成员单位以及53家驻外机构。







决战决胜 助力脱贫攻坚战全面胜利

66 ...

到 2020 年现行标准下的农村贫困人口全部脱贫,是党中央向全国人民作出的 郑重承诺,必须如期实现。这是一场硬仗,越到最后越要紧绷这根弦,不能停 顿、不能大意、不能放松。●●



中国船舶集团认真贯彻落实党中央关于打赢脱贫攻坚战重要决策部署,以 高度的政治责任感把习近平总书记提出的"要真扶贫、扶真贫、真脱贫" 的重要指示精神落实落细,扎实推进云南省鹤庆县、勐腊县、丘北县定点 扶贫工作。"十三五"期间,中国船舶集团先后派出 21 名干部支援帮扶 县建设,累计投入各类资金超过 4.5 亿元,实施帮扶项目超过 200 个,带 动 4 万多名建档立卡贫困人口脱贫增收。截至 2020 年底,中国船舶集团 定点帮扶的鹤庆县、勐腊县及丘北县全部实现脱贫摘帽,为决战决胜脱贫 攻坚贡献了积极力量。



云南省大理州鹤庆县

自 2002 年以来,中国船舶集团抓实各项扶贫 措施,构建了产业扶贫、教育扶贫、健康扶贫、 住房保障、饮水安全、基础改善、资金整合等 系列政策体系,脱贫攻坚取得了显著成效。累 计投入无偿帮扶资金超过 7888 万元,开展消 费扶贫 5556 万元,实施 120 个帮扶项目,经 过多年的努力,成为云南省首批脱贫摘帽的15个县之一。

践行精准扶贫

2020年,通过产业扶贫、消费扶贫、教育扶贫、医疗卫生扶贫以及基础设施建设、 干部和技术人才培训等,多领域、全方位、多层次地助力丘北县脱贫摘帽,鹤庆县 和勐腊县巩固脱贫成果、提前超额完成国务院扶贫开发领导小组下达的各项指标及 仟务。





云南省西双版纳州勐腊县

自 2002 年以来,中国船舶集团投入无偿帮扶 资金 4734 万元,实施了援建中国船舶磨憨尚 冈希望小学、中国船舶纳卡希望小学、建设边 民互市、修建致富路幸福桥、捐赠医疗卫生 设备等项目,累计消费扶贫采购各类农副产品 4851万元;投入1亿元发起设立勐腊产业扶 贫基金,投资蜂蜜、橡胶木、普洱茶等产业项目,带动当地特色产业发展。



云南省文山州丘北县

2012 年以来,中国船舶集团聚焦产业扶贫, 投入1亿元设立全国首个县级产业扶贫基金, 先后向云泰辣椒等龙头企业投入资金 9439 万 元,助力特色产业发展;累计投入 2200 余万 元,实施道路交通等基础设施项目建设,改 善生活条件;累计投入2300余万元,实施了 2所希望小学和1栋综合楼建设等项目,阻断贫困代际传递;大力开展消费扶贫,累计采 购丘北县农副产品 4549 万元,并帮助销售农副产品 2015 万元,助力农副产品"走出大山"。

--中共中央总书记、国家主席、中央军委主席 习近平

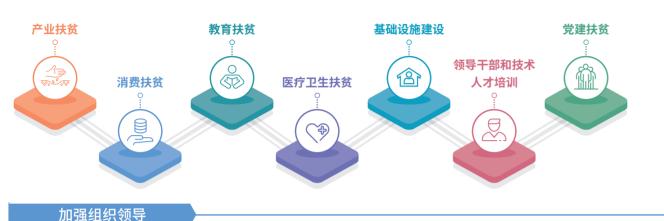






打造扶贫"中国船舶集团模式"

坚持"真扶贫、扶真贫",结合云南省鹤庆县、勐腊县和丘北县实际情况,整合多方资源,促进内外协同,探索形成七 位一体的精准扶贫模式,从根本上解决困难群众基本生产生活难题。



★ 连续在国务院扶贫开发领导小组定点扶贫考核工作中获评 "好"。

- ★ 《持续推进产业扶贫 增强内生发展动力》案例 入选国务院扶贫办 2020 年企业精准扶贫专项 扶贫案例 50 佳。
- ★ 派驻的定点扶贫县挂职副县长、驻村第一书记 或工作队员多人多次获评省部级、州市级、县 级扶贫工作先进个人。

2020年,组织召开9次扶贫会议, 制定并推进18个方面、40项扶贫 重点任务。集团公司董事长雷凡培、 总经理杨金成高度重视,分别赴丘 北县、勐腊县检查扶贫工作进展, 帮助协调解决存在的问题。





强化紧前安排

对照中央单位定点扶贫责任书明确 的各项目标要求,主动加压,紧前 安排,加大投入,全年指标均超额 超前完成。

中国船舶集团加强定点扶贫工作 宣传,相关成绩和事迹在主流媒 体及新媒体刊发,引起较大反 响,有力宣传了责任央企的良好 形象。

..**п**

向鹤庆县、勐腊县、丘北县及西双版纳州捐赠5台 红外测温仪、100部手持式额温枪和42万只口罩 等防疫物资,助力打赢防疫狙击战和脱贫攻坚战。

按照国资委等上级机关部署,及时安排落实抗疫救 助及帮助销售滞销农产品。

加强抗疫助力

分别派出6位同志赴定点扶贫县(村) 挂职,着力推动帮扶项目落地实施,积 极参与所在地方改革发展工作,支撑所 在地方脱贫攻坚和经济社会发展。

加强挂职干部管理

加强宣传报道

12 中国船舶集团有限公司



加强产业基金管理和投放力度

充分发挥勐腊产业扶贫基金和丘北产业扶 贫基金的作用,与丘北县双龙油脂公司、立 达尔公司签署协议,并分别向两家公司投放 1500万元,支持重点项目发展;同时,完 成勐腊县万泽农业、云锰橡胶两个投资项目 论证。

> 重点围绕定点扶贫项目立项、 进展及成效,安排相关人员赴 鹤庆、勐腊及丘北进行督促指 导,发现问题及时反馈、督促 落实整改。

> > 加强督促检查



2020年,面对坚决打赢疫情 防控阻击战和科研生产经营 攻坚战的双重大考,中国船 舶集团坚决贯彻落实以习近 平同志为核心的党中央决策 部署,关键时刻勇担当,越 是艰险越向前,坚决夺取疫 情防控和科研生产经营"双 胜利",以实际行动在这场 大战大考中践行初心使命。

积极响应党中央决策部署

新冠肺炎疫情发生后,中国船舶集团以高度的政治自觉挺身而出,快速响应、全面 动员、周密部署,以实际行动彰显责任和担当。

2020 年 1 月 25 日,习近平总书记主持召开中央政治局常委会会议对疫情防控工作 作出部署后,2020 年 1 月 26 日,中国船舶集团成立疫情防控工作领导小组及其办 公室,研究部署落实落细疫情防控各项要求,迅速构建起总部及成员单位上下联动、 群防群治、运转协调的疫情防控工作体系。

发挥产业优势 全力以赴投入疫情防控阻击战

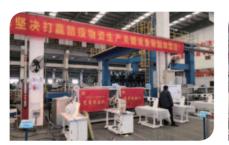
中国船舶集团主动担当,充分发挥自身产业优势,为疫情防控贡献力量。

在医疗救治的最前线,中国舰船研究院所属湖北六七二医院 521 名医护人员与时间 赛跑、与疫魔较量,连续奋战在抗疫一线。





中国船舶集团第八研究院鹏力科技集团、河北汉光重工有限责任公司紧急承担医疗物资生产关键设备研制攻关任务,仅用 11 天就完成 N95 口罩机、平面口罩机和压条机样机研制,15 天实现量产设备连续供货,以"战时速度"抗击疫情。







武昌船舶重工集团有限公司、武汉船用机械有限责任公司等单位发挥专业优势,出色完成支援火神山、雷神山医院建设,并 全力协助抗疫物资运输,下沉社区抗疫等工作。



海丰通航科技有限公司等单位组成中国船舶防控抗疫航空救援队,先后投入三架直升机,赴武汉、温州、仙桃、宜昌、黄冈等地, 历时 40 天,共飞行 146 小时,运送抗疫急救物资 32 万件。



2 月 17 日,中 国船舶集团党组 传达学习贯彻习 近平总书记关于 疫情防控工作的 重要讲话精神。



积极开展抗疫公益捐赠活动

在疫情防控阻击战的紧急时刻,中国船舶集团积极开展抗 疫公益捐赠活动。

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疫情期间,中国船舶集团共组织捐赠各类资金 6148.47 万元、口罩 68.7 万只、 医用防护服 1.08 万件、 消毒液原液 5.7 吨、免洗手消毒液 2.1 万瓶、

周毒液原液 3 • 1 吨、免洗于周毒液 2 • 1 移动式医疗垃圾焚烧方舱 6 台





中船邮轮科技发展有限公司为因疫情影响无法返 沪工作的意大利专家寄送口罩等防疫物资。

荣获国家表彰

2020年9月8日,全国抗击新冠肺炎疫情表彰 大会在北京人民大会堂隆重举行。大会对全国抗 击新冠肺炎疫情先进个人、先进集体、全国优秀 共产党员、全国先进基层党组织进行表彰。中国 船舶集团荣获抗击新冠肺炎疫情先进集体及个人 表彰各一项。

全国抗击新冠肺炎疫情先进集体 < 中国船舶集团第八研究院鹏力科技集团 >



全国卫生健康系统新冠肺炎疫情防控工作先进个人 < 中国舰船研究院所属湖北六七二中西医结合 骨科医院感染三病区护士长 张琦 >



稳步推进复工复产

面对严峻形势,中国船舶集团坚持"计划不变、指标不调、任务不减、力度加大"工作方针,全面 落实常态化疫情防控措施,千方百计复工复产、追赶进度、挽回损失,用3个月时间整体恢复到上 年同期水平。复工复产以来,中国船舶集团没有发生一起在岗感染病例和境外输入病例。



凌晨 3 点,重庆齿轮箱有限责任公司 总装员工正在对箱体表面进行检验



凌晨 1:30,重庆红江机械有限责任公司 车间内灯火通明

凌晨的我们

2020年6月,中国船舶集团科研生产进 入最忙碌的攻坚阶段,所属各成员单位咬 定目标,绝不放松。为了抢时间、赶进度, 广大干部职工勠力同心,不分白天黑夜连 轴转,誓言达成目标、完成使命。



七〇四所工程师深夜仍在勤奋工作



零点,七一〇所实验室正在进行百小时 不间断系统拷机实验





中国船舶集团以习近平总书记重要指示为统领,立足新发展阶段、 贯彻新发展理念、构建新发展格局,胸怀"两个大局",心怀"国 之大者",牢记船舶工业是党和国家事业,以明确的使命责任和 战略蓝图统一思想、凝心聚力,为党和国家事业发展作出更大贡 献。



坚持党的领导

我们牢记"央企姓党",深刻把握集团公司在党和国家发展全局中担负的责任使命,坚决贯彻落实习近平总书记重要指 示批示和党中央各项决策部署,把党的政治优势转化为企业的竞争优势,沿着党中央指明的方向笃定前行。

学习贯彻习近平总书记重要指示批示精神

坚持"第一议题"制度,把加强学习、提高政治 站位作为头等大事抓紧抓好,在学习中加深对习 近平新时代中国特色社会主义思想和党中央决策 部署的准确理解把握,深入贯彻执行。





坚持发挥党建政治优势

我们强化集团公司党组把方向、管大局、促落实作用,坚持和完善"三重一大" 决策机制,全年召开 51 次党组会,共研究 402 个议题,前置讨论重大生产经营议题 121 个,直接审议决策 281 个。推动党建与业务工作深度融合,坚持围绕中心抓党建,将完成年度目标作为加强党建考核的重要内容。

面向成员单位,全面落实"双向进入、交叉任职"领导体制,切实把党的领导融入公司治理各环节,把企业党组织内嵌 到公司治理结构之中,使党组织发挥作用组织化、制度化、具体化。



加强党的建设

我们坚定不移加强党的建设,深化全面从严治党,通过抓党建、强党建推动践行"两个维护"的制度和机制进一步完善, 党组织政治功能和组织力进一步增强,有力保障了高质量发展。

全面开展党的组织、制度和队伍建设

制定了《中国船舶集团有限公司成员单位党组织工作管理办法(试行)》等一系列党建组织制度,党的建设更加规范高效。 党组书记雷凡培和党组成员带头深入基层讲党课。开展"两优一先"表彰,表彰了一批"中国船舶优秀共产党员标兵"、 "中国船舶优秀党务工作者标兵"、"中国船舶示范党支部",营造"比学赶超"的浓厚氛围。



- ★《成员单位落实 全面从严治党主体责任管理规定》
- ★《中国船舶集团有限公司成员单位党组织工作管理办法(试行)》
- ★《成员单位党组织落实全面从严治党主体责任考核评价暂行办法》
- ★《党委(党组)书记抓基层党建工作述职评议考核办法(试行)》
- ★《党组(党委)理论学习中心组学习实施办法》
- ★《党员领导干部民主生活会实施办法》

强化干部和人才队伍建设

坚持党管干部、党管人才的原则,积极构建干部人才选、用、育、留各环节协调统一,有效管用的体制机制。紧抓领导 干部这个"关键少数",把强化整体功能,优化班子结构贯穿成员单位领导班子配备全过程,调整加强 69 家成员单位 和领导班子。加强优秀年轻干部选拔培养,盘点掌握 597 名优秀年轻干部,调整任命型号"两总"153 次,新增国家 万人计划 2 人、百千万人才工程国家级人选 3 人、全国创新争先奖 1 人、国防科技创新团队 3 个,2 个团队获得首届国 防科技工业突出贡献奖,87 人获得国务院政府特殊津贴,选聘集团公司高级技术专家 199 人、高级技能专家 60 人。



持续深化集团公司纪检监察体制改革,支持完成纪检监察组组建,持续 加大案件查办力度,驰而不息纠治"四风",深入开展以案促改工作。 深化中央巡视整改和专项整治工作,持续开展巡视巡察工作,圆满完成

深入开展全面投影成进位巡视工作。

持续深化集团公司纪检监察体制改革,支持完成纪检监察组组建,持续加大案件查办力度,驰而不息纠治"四风",深入开展以案促改工作。 深化中央巡视整改和专项整治工作,持续开展巡视巡察工作,圆满完成两轮 38 家成员单位巡视工作。







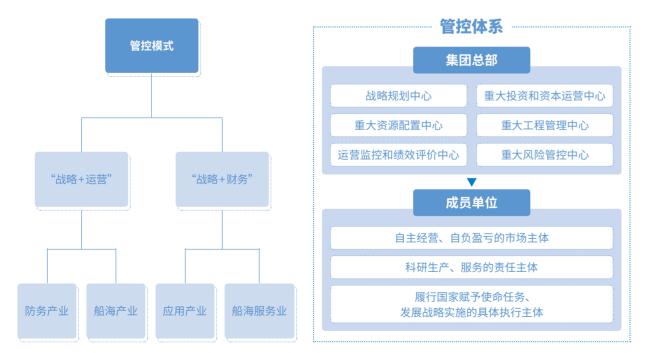
我们准确把握内外部环境变化,以习近平总书记重要 指示为指引,坚持战略引领,发布实施《中国船舶集 团有限公司高质量发展战略纲要》,奋力开启建设世 界一流船舶集团新征程。



6月1日,中国船舶集团有限公司召开第一次战略工作会议,正式发布《中国船舶集团有限公司高质量发展战略纲要》。

《中国船舶集团有限公司高质量发展战略纲要》主要内容





企业使命	战略目标
引领行业发展 支撑国防建设 服务国家战略	构建产业结构合理、) 效益领先、军工核心突 国际竞争力强的世界- 船舶集团
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
作为我国海洋防务装备科研 量,着力推动海军武器装备 建设世界一流海军提供坚强支	跨代跃升,为
建反巴介一加海牛捉供至强又	すい
	<u></u> .
彩 科技应用产业	
充分发挥科技应用与装备制 海洋相关技术转移转化;高刻 形成合理业务结构,实现业务	效运用现有资源,
	战略
做 优 化 做 优 化 份 优 船 海 产 业 业	強化 4 动绿 6 智能 8 人利 5 人利 5
旁 一次 一次 业 业 业	投 也 创 日 新 能
	<u> </u>

落实主体责任 强化使命担当

聚焦战略重点 合理调配资源





履行强军首责

作为我国海军武器装备建设的主体力量,中国船舶集团牢记兴装

研制新型武器装备

我们创新军工管理,狠抓军品质量,加强组织协调,按期优质完成了多型海军武器装备研制任务。









Islade die





我们紧贴任务需求,加强服务保障,助力人民海军圆满完成多项访问、护航、演习保障任务。

远洋护航保障 医疗船"和平方舟"号等遂行保 障任务 海军第33批、第34批、第35批、 第36批护航编队在亚丁湾、索 马里海域护航保障任务









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装备巡检及试航调试

参与上海、舟山、宁波等东海 区域装备巡检 服务保障舰艇试航、动力试验、 武备调试任务



积极支持海事装备建设

我们发挥研发、设计、建造、配套等专业优势,大力发展海监、巡航救助船等多型号、系列化公务船舶,为我国建设海 洋强国、维护国家海洋权益作出积极贡献。



2020 年 9 月 29 日,由七〇一所设计、中船黄埔文冲船舶有限公司建造的我国规模最大、装备先进、综合能力强、具有世界领先水平的万吨级海事巡逻船"海巡 09"号成功下水。





2020 年 5 月 20 日,武昌船舶重工集团有限公司建造的"海巡 1110"和"海巡 1111"顺利交付。该型船是海南海事 局首型中型巡逻船,配备直升机升降平台、艏侧推、非收放式减摇鳍、网上信息化系统等先进巡航设备。





2020 年 7 月 22 日,武昌船舶重工集团有限公司建造的 2000 吨大型航标船 "海巡 173" 轮在广州 正式交接暨列编,"海巡 173" 轮是目前中国交通运输系统规模最大、装备最先进的航标船。







聚焦主业实业

中国船舶集团立足产业报国,大力推动技术、人才、资金等各类 资源向主业实业集中,不断向产业链价值链中高端拓展,产业结 构持续优化,竞争力不断提升。



全球首艘 23000TEU 双燃料动力集装箱船

2020 年 9 月 22 日, 全 球首艘 23000TEU 双燃 料动力集装箱船"达飞 雅·克萨德"号完工交付。 该船是全球最大的以液化 天然气(LNG)为动力的 集装箱船,配备自主研发 世界最大 X92DF 双燃料 动力主机。



17.4 万方 LNG 船

2020年8月31日,17.4 万方LNG船"天玑星" 号完工交付。该船采用新 一代双燃料动力系统,产 品性能与世界顶尖LNG 船同步。

船海产业 实现增效升级

我们持续推进主流船型优化,加强高 技术船舶研发,加快向中高端转型升 级,形成一流的产品和服务,打造一 流品牌。2020年,中国船舶集团新 接船舶订单量、造船完工量、手持船 舶订单量全球占比分别为23.3%、 19.4%、21%,三大造船指标均居世 界第一。



803

研发设计

围绕绿色化、智能化、轻量化、深远化,加快传统船型优化升级,推出一批引领市场发展的前瞻性产品。

打造优质产业链

船海配套

围绕提高船海业务整体增加值,加快创新发展,自主研发的世界最大船用双燃 料低速机研制成功并实现批量接单、连续交付,船舶压载水装备市场份额持续 保持世界第一。

生产建造

围绕提高生产效率、管理水平,实施船海业务经营、生产看板管理和主建船型 目标周期管理,全年造船完工量位居世界第一,按期交船率得到明显提升,部 分主建船型关键周期持续缩短。

市场营销

面对疫情影响下需求下滑、人员往来受阻等严峻形势,同步开展线上线下营销,新接船 舶订单和手持船舶订单市场份额保持世界第一。

★ ★ _____ 8.4 万方 VLGC 完工交付

2020 年 12 月 10 日,江南造船(集团)有限责 任公司建造的第 2 艘 8.4 万方 VLGC(超大型液 化石油气运输船)完工交付。

8.4 万方 VLGC 是江南造船自主设计的第二代产 品,拥有"上海品牌"称号。该型船设计总长 230.0 米、型宽 36.6 米、型深 22.2 米、设计吃 水 11.4 米、结构吃水 12.0 米,是市场上典型的 "三高"(高技术、高难度、高附加值)船型。

★ ★ _____ 全球首艘具有自航能力的 FPSO 交付

2020 年 8 月 31 日,上海外高桥造船有限公司建造的全球首艘具有自航能力、也是迄今建造的第二艘世界独创 Fast4Ward[®] "通用型"海上浮式生产储油船(FPSO)完工交付。

与首制船相比,该船最大的特点就是需要按照航行船舶的要求,在机舱的尾部单独设计2个推进器舱室,增加两台 3860Kw 主发电机以及相关辅助系统,在整体布置、系统配置和设备选型上均要符合相关海事规范和要求,使其成为全 球首艘可以航行的大吨位 FPSO。









2020 年 4 月 20 日,大连船舶重工集团有限公司 建造的新一代 32.5 万吨超大型矿砂船"铁山" 号完工交付。

"铁山"号全船压载系统管系采用玻璃钢材质, 配置有排气硫氧化物洗涤装置和液化天然气燃料 预留舱,环保、节能、安全、坚固,亮点突出, 总体性能达到世界领先水平。



2020年11月12日,大连船舶重工集团有限公司建造的30万吨超大型油船"远贵洋"号完工交付。

该船以优秀的船体型线配以更节能的G型主机和新型大直径高效螺旋桨,并且配置了具有自主知识产权的桨前节能装置, 节能效果明显。





2020 年 4 月 22 日,沪东中华造船(集团)有限公司建造的 4.9 万吨双相不锈钢化学品船完工交付,标志着同系列 4 艘船舶建造项目完美收官。

该型船设计总长 182.88 米、型宽 32.2 米、型深 19.8 米、设计吃水 11.0 米,最大满载货物比重为 1.67 吨 / 立方米, 舱容为 5.4 万立方米。该船有 33 个双相不锈钢货舱,一舱一泵,可以装载近千种化学品及成品油,包括石化产品、油 脂化学品、植物油以及润滑油等。





2020 年 4 月 16 日,上海外高桥造船有限公司建 造的 21 万吨散货船 "ATLANTIC TIGER"号完工 交付。

该型船入级法国船级社(BV),采用新型绿色 节能设计,相较于传统好望角型散货船,在航速、 油耗、载货量上均具有明显优势。







2020 年 4 月 30 日,沪东中华造船(集团)有限公司 建造的世界最大液化天然气(LNG)加注船完工交付。

该船长 135 米,可为全球最大的 23000 箱 LNG 动力集 装箱船提供全流程服务,并且一次加注就可保障这一 巨轮航行 1.95 万海里,覆盖从欧洲至远东的往返航程。 同时,该船也能为其他各型双燃料动力的货船进行加 注。



2020年12月,武昌船舶重工集团有限公司举行"国信1号"建造启动仪式。

"国信1号"为全球首艘10万吨级智慧渔业大型养殖 工船,在设计上秉承绿色养殖理念,采用国内领先、 世界一流的减震降噪技术,将养殖空间与船舶总体有 机结合,构建生态、高效、集约化舱养空间。







2020 年 1 月 15 日,上海外高桥造船有限公司设计建造的 CJ50 型自升式钻井平台完工交付。

CJ50型自升式钻井平台属于目前主流的自升式钻井平 台之一,主要用于海上石油和天然气勘探、开采工程 作业。该平台桩腿长度165米,大钩载荷908吨,最 大钻井深度35,000英尺,作业水深可达400英尺,入 级美国船级社(ABS)。



2020 年 5 月 26 日,中船温特图尔发动机(上海)有限公司研发的世界最大船用双燃料低速机以"云"交付的形式向全球发布。

中国船舶集团董事长雷凡培表示,此次面向全球发布的WinGD X92DF主机,是中国船舶顺应全球海事业绿色节能、低碳环保的发 展趋势,紧密围绕客户需求,自主研发的目前世界上最大的船用双 燃料低速机,标志着中国船舶动力研发、制造、服务能力迈上一个 新台阶,并为全球船舶行业发展注入了新的动力。未来,中国船舶 将致力为全球用户提供更加高效、节能、绿色的船舶产品和更加优 质的服务,进一步深化拓展与各方合作,共同推动全球海事业持续 健康发展。

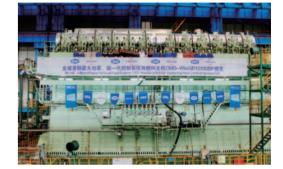
该型机额定功率达到 63840 千瓦,集超大功率、智能控制、绿色环保于一体,性能和排放指标达世界领先水平。该型 机在燃气模式下,采用奥拓循环原理、低压燃气进气等先进技术,可满足目前最严苛的国际海事组织(IMO)氮氧化物 Tier III 排放标准。





2020 年 11 月,七〇四所研制的超大型减摇鳍成功交付,标志着 国内最大面积减摇鳍正式投放国际市场。

七〇四所超大型减摇鳍研发历经10余年,突破了多项关键技术, 开发出襟翼鱼尾鳍,在同等面积和航速下产生的升力比国外常用 的襟翼鳍大8%,具有自主知识产权,达到国际先进水平。



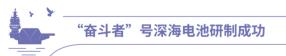




2020 年 8 月,重庆红江机械有限责任公司生产的 LGIP 双燃料低速机"部套总成"完成生产、装配全过程,成功发往 主机厂进行装机。

LGIP 双燃料低速机是一种以清洁能源液化石油气为主要燃料的新型船用发动机,装船运行后,船舶氮氧化物排放可降 低近 80%,硫氧化物排放可降低 90% -100%,无需安装脱硫塔即可满足最新限硫令要求。此外,其颗粒物排放可减少 90%,二氧化碳排放可减少13%-18%,船舶能效设计指数(EEDI)可提升13%-20%,在绿色减排方面具有显著优势。





2020年11月28日, "奋斗者"号全海深载人深潜器成功完成万米海试并胜利返回,该深潜器搭载由七一二所研制的 深海电池,11000米深海电池是"奋斗者"号万米载人潜水器的关键技术之一,提供潜水器运行所需电力。

11000 米深海电池的安全性、可靠性经过了充分的科学论证,其研制成功,解决了深海电池基础理论问题,从共性技术 到系统集成,系统性提高了我国深海电池设计、制造以及试验等方面能力,填补了我国全海深潜水器用锂离子电池空白。



2020年12月10日,七一二所成功研制电动锚绞机高效永磁化 驱动系统,使我国在新一代大型船舶靠泊关键驱动设备上实现自 主创新。

该型永磁高效电机应用于大型邮轮锚绞机的动力装置,可以根据 绞车抛锚、起锚和收锚等工况需求实现恒张力运行,并且具备远 程控制功能。同传统液压绞车相比,该电动绞车体积更小,重量 更轻,具有系统效率高、结构简单、维护方便等特点。







2020 年 4 月 22 日,中国船舶集团有限公司与卡塔尔石油公司在中国北京、上海及卡塔尔多哈三地以"云签约"方式 联合签署"中国船舶—卡塔尔石油液化天然气(LNG)船建造项目"协议,所涉订单总金额超过 200 亿元人民币。







2020年1月9日,江南造船(集团)有限责任公司 在上海举行两艘 98000 立方米 B 型舱超大型乙烷运输 船(VLEC)项目建造合同、租赁协议及船舶租约签字 仪式。该型 VLEC 是世界上最大舱容的 VLEC 船型, 也是可航行在休斯敦水道最大尺度的液化气船,最大 舱容达 99000 立方米。



📕 3 艘 17.4 万方 LNG 船造船合同顺利签署

2020年6月30日,沪东中华造船 (集团)有限公司与联合液化气体 运输香港有限公司签署3艘17.4万 方LNG船舶建造合同,签约仪式以 "云签约"的形式通过京沪视频连 线成功举行。





承接 12 艘 12 万吨双燃料油轮订单

2020 年 4 月 29 日,中国船舶工业贸易有限公司、上海外高桥造船有限公司、广船国际有限公司与交通银行股份有限 公司旗下交银金融租赁有限责任公司在北京、上海、广州三地以"云签约"方式签署 12 艘 12 万吨双燃料油轮建造合同, 合同总金额约 46 亿元人民币。





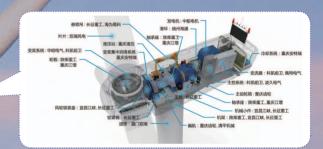
科技应用产业加快发展壮大

我们充分发挥防务产业和船海产业领域的技术储备、设施设备、人才资源、客户群体等优势,积极推动军民技术开放共 享,技术协同创新,通过壮大一批、培育一批、孵化一批、退出一批等"四个一批"建设,在清洁能源装备、应急装备、 电子信息装备、环保装备、基础设施建设与工程装备、新材料等领域取得标志性进展。



为绿水青山贡献船舶力量-中国船舶集团风电产业一览

中国船舶集团拥有国内实力强劲的 自主研发与生产体系,具备强大的 机、电、液、控一体化装备制造服 务保障能力,形成了从叶片、齿轮 箱、发电机、控制系统到机座、机架、 塔筒、轮毂等全系列制造能力,以 及资源开发、零部件制造、整机研发、 工程安装、运维服务等全产业链保 障能力,是我国唯一具备较完整风 电装备研制生产服务保障体系的专 业化集团。



【辽宁省大连市庄河海域】华能大连庄 河海上风电Ⅱ项目

【辽宁省兴城市】中国船舶兴城大型海 上风电装备产业园

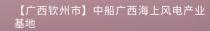
【江苏省如东县海域】华能如东 H3 海上 风电场

【内蒙古锡林郭勒盟苏尼特左旗】内蒙 古京能苏尼特项目

【新疆木垒老君庙】新疆天山电力乾元 申宇项目



【山西省昔阳县】山西昔阳项目



【浙江省宁波市象山县】中国海装象山大 型海上风电智能化装备产业园



2020年11月26日,中船广西公司海上风电产业基地在钦州正式开工建设。该项目主要建设10万吨级重力式码头两座, 4万吨级滑道、2万吨级滑道各一座,配套建设钢材预处理线、结构车间、工艺管线车间等设施,计划于2022年6月 建成投产。

该产业基地是涵盖海上风电装备研发设计、关键装备制造、装备配套、总装集成和海上安装施工及全寿命周期运维等全 核心要素的产业基地。该产业基地用地约 2640 亩,总投资约 129 亿元,将形成年装机总容量为 150 万千瓦的海上风电 装备生产制造、安装施工及运维能力,预计达纲年产值约 500 亿元。



签订氢能项目合作框架协议

2020年11月,七一八所与东方锅炉股份有限公司签订合作协议, 双方将在氢能开发、投建运及装备生产制造等领域开展区域性合 作,共同推动氢能产业高质量发展,建立长期战略合作伙伴关系, 促进双方氢能产业发展进一步深化。





2020 年 9 月 15 日,沪东中华造船 (集团)有限公司建造的中国首例 LNG-FSRU(浮式 LNG 存储及再气化装置)项目完 工交付。这是中国船企首次进入全球高难度大型 LNG 海工装备改装领域。

沪东中华造船(集团)有限公司经过一系列技术改造和设备结构改装,为原船成功升级配置了五大系统,使其脱胎换骨, 成为了一艘高质量的集 LNG 接收、存储、转运、再气化外输等多种功能于一体的 LNG-FSRU 特种运输船。





2020年12月16日,中国船舶集团新能源有限责任公司乌拉特中旗100MW槽式光热发电站项目顺利实现满负荷发电。

乌拉特中旗 100MW 光热发电项目于 2018 年 7 月开工建设,是国家能源局首批 20 个示范项目之一,也是国内装机最大、 储热规模最大的槽式光热发电站。项目总占地面积约 7500 亩,共安装 375 条槽式集热回路。





2020年10月,七一一所研发生产的首套 国产乙炔螺杆压缩机组成功投运。

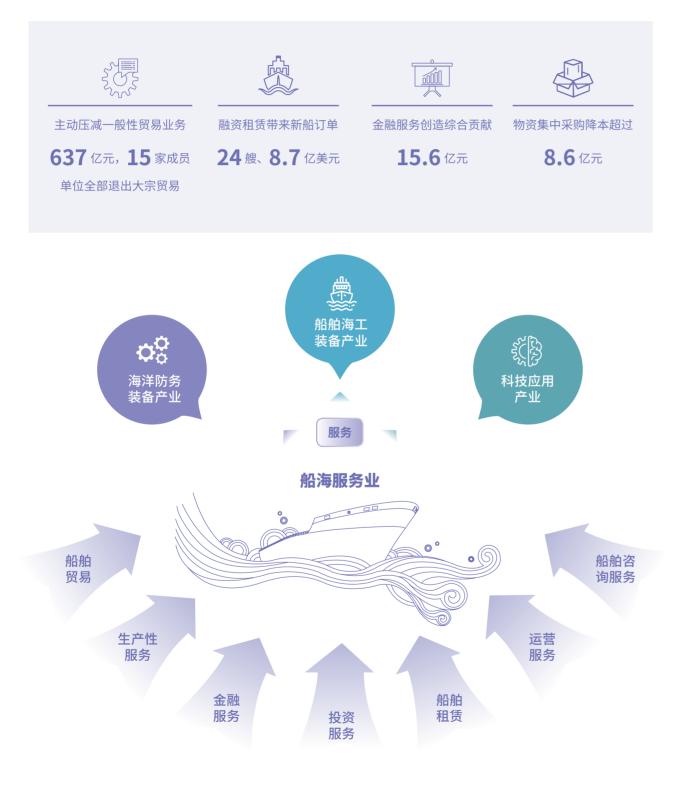
七一一所对乙炔裂解气压缩机和真空压缩 机进行国产化攻关,针对性地设计出适用 于乙炔气体的新机型,打破乙炔螺杆压缩 机长期被进口设备垄断的局面。





船海服务业持续做稳做实

我们紧密围绕和服务于防务产业、船海产业和科技应用产业,积极发展船舶贸易、金融服务、投资服务、租赁服务、生 产性服务、船舶运营等船海服务业,延伸拓展产业链价值链。







中国船舶集团物资有限公司在全国设有10个仓储配送基地和4个钢材加工配送中心,在高性能海洋平台用钢、深海耐 压装备用钢等方面联合国内钢铁企业共同进行技术攻关,建立保供应、保服务的专业平台,降低钢材采购、仓储理货、 预处理、物流运输成本,从源头为产业链整体竞争力打下良好基础,推动船厂向国际先进的总装化造船模式转变。



中国船舶集团财务公司为全力支持中国船舶集团成员单位复工复产、加大金融助企纾困力度,下调贷款利率、上调存 款利率;票据承兑、保函、委托贷款等中间业务免收手续费,免收保证金,最大限度为成员单位提供低成本资金支持。 中国船舶集团财务公司在支撑保障实体产业提升竞争力的同时,自身获取持续稳定的投资回报。



中船第九设计研究院工程有限公司完成上海、山东、江苏、浙江、福建等地一批城镇化和保障房项目建设,取得良好的 社会和经济双重效益。



2020年,中国船舶(香港)航运租赁有限公司包括其合营及联营公司新签船舶 31艘,合同金额 11.22亿美元。



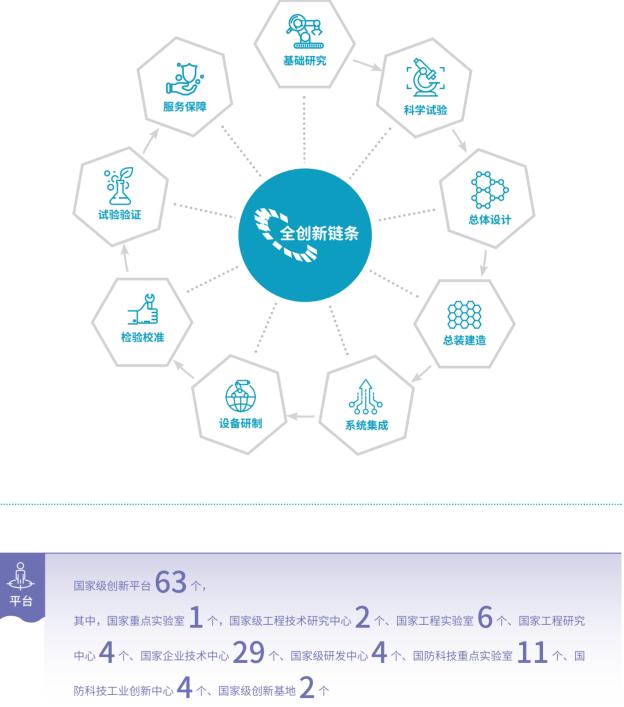
矢志科技创新

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中国船舶集团始终把科技创新摆在建设世界一流船舶集团的核心位置,坚持 以重大科技创新工程为抓手,以不断提升自主创新能力为主线,加大关键核 化船舶工业国家战略科技力量,努力打造我国船舶工业原创技术"策源地" 和产业链"链长",为船舶工业科技自立自强和科技强国建设做出贡献。

中国船舶集团拥有36家科研院所和63个国家级创新平台,已经基本具备了涵盖船舶工业基础研究、科学试验、总体设计、 总装建造、系统集成、设备研制、检验校准、试验验证与服务保障的全创新链条,形成了较为完善的科技创新体系。





实施重大科技创新工程

坚持面向世界科技前沿、面向经济主战场、面向国家重大需求,主动作为,统筹推动16个重大科技创新工程的论证和实施, 不断增强重大科技工程的综合牵引带动作用。



奋斗者"号全海深载人潜水器成功完成万米海试并胜利返航

自 2020 年 10 月 10 日起,由七〇二所牵头研制的"奋斗者"号全海深载人潜水器赴马里亚纳海沟开展万米海试,于 11 月 10 日成功坐底,坐底深度 10909 米,创造了中国载人深潜新纪录,标志着我国在大深度载人深潜领域达到世界 领先水平。

"奋斗者"号在研制过程中充分调动和统筹各方科研力量,突破了大深度载人潜水器总体设计与集成、快速潜浮与水下 航行性能综合优化设计、深海长寿命稳定供电等关键技术,克服了深渊高压等极端环境下各种挑战,总体国产化率超 96.5%,海试期间"奋斗者"号完成 24 人次万米下潜,达到世界万米下潜总人次数的 50%。



2020年1月,中国舰船研究院联合七二二所等单位设计建造的全球首个民用极低频大功率电磁波发射台建成。

发射台探测半径达数千公里,探测深度达十公里,形成了可覆盖我 国领土和领海的高信噪比极低频电磁波信号源。



加强关键核心技术攻关

中国船舶集团潜心技术研发,加大科技研发投入,深化民船海工产品轻量化、高能效、新能源应用等关键技术研究,打造精品主流船型。



2020年2月22日,上海外高桥造船有限公司被授予首批20家"上海市智能工厂"称号。











2020年7月,江南造船(集团)有限责任公司首 个机器人智能化生产线吊马智能工作站正式启动 运行。

江南造船吊马智能工作站是目前船舶行业最先进 的船用吊马生产线,首次在船舶行业内集成了机 器人视觉识别、智能抓取、智能焊接技术。该吊 马生产线的投入使用,可以大幅减少用工需求, 将原来的27人团队压缩至5人,且能够保持吊 马生产质量的稳定性。

两大新船型获英国劳氏船级社原则性认可证书

2020年10月16日,江南造船(集团)有限责 仟公司研发的智能型超大型液化气体运输船(智 能 VLGC)、氨燃料(NH₃)动力超大型液化气体 运输船 (VLGC) 分别获得了英国劳氏船级社(LR) 颁发的 Digital Ships 原则性认可证书和原则性认 可证书(AIP)。



智能 VLGC——"智能船舶系统(JNIS)"

采用集成化数据采集和处理平台,搭载可 靠的船舶能效管理、智能航行、机舱设备 和液舱围护系统的健康状态诊断以及电气 系统综合监测等智能应用 APP, 能够有效 帮助船东提升船舶的安全性、降低能源消 耗、简化船舶管理。

新能源燃料——"氨燃料"动力认证

氨水(NH3)作为氮氢化合物,便于储存、运输,供应稳定, 且燃烧时不会产生温室气体二氧化碳。因此,氨燃料动 力液化气船可有效降低碳氧化物和硫氧化物排放,实现 真正意义上的"零"排放。此次 VLGC 氨燃料动力认证, 是江南造船继研制 LNG、LPG、乙烷双燃料动力液化气 船之后的最新尝试。

助力主业实业转型升级

中国船舶集团坚持以科技创新引领主业实业高质量发展,扎实推进船海产品转型升级和高端装备研发突破,不断提高科 技供给质量,加快推动船海装备迈向全球价值链中高端。



《集团公司船海产品升级行动计划(2020-2022 年)》明确提出,船海产品升级目标是主力船型 空船重量降低 1-3%, 结构部件数降低 5% 左右, 油耗降低 5% 以上,所有船型均能满足 EEDI 第二 阶段要求。民用船舶完成三大主流船型、液化气 船等5类64型产品的研发与升级;海工装备完成 自升式钻井平台、FPSO 等 4 类 18 型产品的研发 与升级。





2020 年 11 月 10 日,备受关注的中国首制大型邮轮在上海外高桥造船有限公司迎来里程碑节点,转入坞内连续搭载总 装新阶段。

该邮轮总长 323.6 米, 型宽 37.2 米, 客房 2125 间, 最多可容纳乘客 5246 人。作为造船"皇冠上的明珠", 大型邮轮 是我国目前唯一没有攻克的高技术、高附加值船舶产品,是名副其实的巨系统工程。



2020年6月2日,广船国际有限公司建造的全球 最大、最环保豪华客滚船开工点火。

该船总长237米,型宽33米,服务航速约23.5节, 入级意大利船级社(RINA);共有 534 间舱室, 可容纳 2370 名乘客,货舱车道长度达 3850 米。 采用一系列绿色环保系统设计,配备最新一代混 合洗涤器系统,可改装为液化天然气(LNG)动 力船舶。



2020年6月23日,中国船舶集团有限公司发布 《集团公司船海产品升级行动计划(2020-2022 年)》



夯实科技创新基础能力

中国船舶集团加大应用基础研究力度,加速布局前瞻性技术研究,引领性原创成果重大突破,积极当好船舶工业国家战 略科技力量。





奋斗者"号万米载人潜水器研发团队获得国家级荣誉

2020年12月,中国船舶集团"奋斗者"号 万米载人潜水器研发团队荣获国务院国资委 党委颁发的"央企楷模"称号。同时,共青 团中央、全国青联授予"奋斗者"号研发团 队"中国青年五四奖章集体"荣誉,七〇二 所高级工程师张伟荣获"中国青年五四奖章"。





2020年8月10日,中国船舶集团有限公司科学技术委员会正式 成立,31名两院院士、4名有关领域资深专家担任集团公司顾问、 特聘顾问。

成立科技委是中国船舶集团全面贯彻落实习近平总书记重要指示 批示精神和中央决策部署,推进两船联合重组深化整合融合进程 中的一项重要工作;是集团公司坚持新发展理念,推动高质量发 展的客观要求;是集团公司坚持问题导向,加固底板、补齐短板 的现实需要;也是集团公司强化主业管控、完善母子公司管控体 系建设的重要举措,对建设世界一流船舶集团具有重要意义。





2020年1月,中国第一代核潜艇总设计师、 中国工程院院士、七一九所名誉所长、"共 和国勋章"获得者黄旭华获国家最高科学技 术奖。





资源重组整合,凝聚发展合力

中国船舶集团按照专业化、体系化、协调化发展思路,根据成员单位功能、 特点、区位,整合融合业务板块,快速完成了贸易、物资、投资、财务、媒体、 智库等领域专业化重组,实施区域化整合、实体化改革,推动技术、人才、 资金等各类资源优化配置。



资源优化配置

"总部机关化"问题专项整改

结合中央企业"总部机关化"问题专项整改,中 国船舶集团确立了总部战略规划中心、重大决策 中心、资本运营中心、重大工程管理中心、运营 监控和绩效评价中心、重大风险管控中心的定位, 建设了专业、精干、高效的一流总部。

平稳高效完成总部机构改革,总部部门数量压减 18%,总部人员规模压减率17.8%, 完成总部机构改革重组,初步打造一支规模适中、 结构合理、文化融合的总部干部人才队伍。



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启动实施改革方案

2020 年 11 月,中国船舶集团落实国务院国资 委关于国企改革三年行动方案的重大决策部署, 组织编制了《中国船舶集团有限公司全面深化改 革三年实施方案(2020-2022 年)》。根据《方 案》,到 2022 年基本完成重组整合主体任务, 完成"十四五"阶段性发展目标,经济指标稳步 增长,发展质量大幅提升。

《方案》明确了 **10**个方面、**33**个领域、 **200**项改革举措,其中列入 2020 年度计 划的 **80**项改革任务全部完成。

加快机制创新,释放发展活力

中国船舶集团在健全现代企业制度、完善法人治理结构、推动混合所有制改革及中长期激励机制落地实施方面取得积极 进展,有效激发和释放了企业发展活力。



深入推进资本运作

中国船舶集团旗下控股或控制10家上市公司,分别为中国重工、中国船舶、中国动力、中船防务、中国海防、中船科技、 中国船舶租赁、中船应急、久之洋、中船汉光。2020年度,我们克服新冠疫情不利影响,推进完成多项市场化债转股 资本运作,完成中船汉光新上市,实现资本市场融资超过 106 亿元,推进"三去一降一补",贯彻落实供给侧结构性 改革政策,在通过国有资本运营助力军工主责船海主业高质量发展方面取得良好成效。



混合所有制改革









中国船舶集团持续完善管理制度和体系、优化管理流程, 在董事会建设、提质增效、合规经营、安全生产等方面 不断提升基础管理水平,夯实集团高质量发展的根基。



规范董事会建设运行

持续加强董事会建设,规范董事会运作,不断健全完善各司其职、各负其责、协调运转、有效制衡的国有企业法人治理 结构。目前,董事会成员共8人,其中国务院国资委聘任5名外部董事。董事会下设军工委员会、战略与投资委员会、 提名委员会、薪酬与考核委员会、审计与风险管理委员会5个专门委员会,并设立了董事会秘书、董事会办公室。

2020 年,中国船舶集团共召开董事会会议 12 次,审议和研究 67 项议案;召开 23 次专门委员会,研究 66 项议案,在 战略重组、深化改革、资本运作、资源整合等方面推进了一系列重大决策。



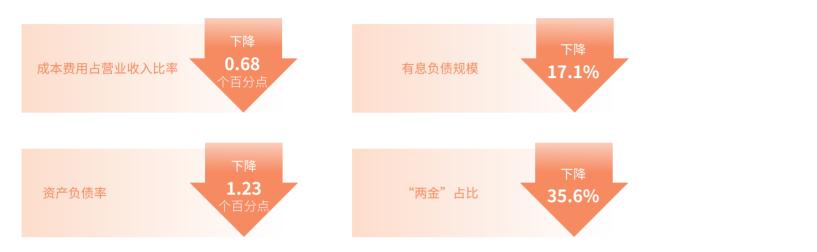
董事会认真贯彻落实党中央加快推进现代企业制度建设的最新要求,充分发挥董事会的"定战略、作决策、防风险"作 用,制定了《中国船舶集团高质量发展战略纲要》《中国船舶集团董事会授权管理规定》,构建了"1+2+N"的董事会 制度体系。



董事会将深入一线调研摆在重要位置,制定年度调研计划,2020年外部董事先后开展调研12次,涉及北京、上海、广东、 湖北、河北、江苏、云南、黑龙江、辽宁、海南等省市36家成员单位和总部5个部门。

深化降本提质增效

我们以"成本工程"为重要抓手,强化目标成本管理,牵引成员单位成本管控和成本管理体系建设,系统提升各方面管 控能力,持续促进降本提质增效,不断提升产品市场竞争力和整体经济效益。





全面实施成本工程

中国船舶集团把成本工程作为事关生存发展的一项"生命工程"来抓,以刮骨疗毒的勇气、持之以恒的韧劲、务实创新 的举措,全面提升集团公司成本管控能力和水平。







落实责任,确保成本工程各项要求落地见效

形成工作合力 总部加强指导支持 成员单位细化举措 互相支持、共同提高

强化考核激励 细化考核体系 落实奖惩要求 各项目标、落实落地

加强法治船舶建设

围绕全面建设治理完善、经营合规、管理规范、守法诚信的目标,聚焦法治体系、法治能力、法治文化,一体推进法治 船舶建设,充分发挥法治工作对整合融合的支持保障作用,对提质增效的价值创造作用,对生产经营的规范助推作用。



开展纠纷案件"压存控增",	2020年 集团公司新制定、修订规章制度 124 项,			
实现重大纠纷案件数量、标的额 双降超过 30 %,				
^{避免和挽回损失} 29.28 亿元。	基本制度 18 项	专项制度 53 项	具体制度 53 项	



强化质量安全管理

中国船舶集团将质量安全作为一项基础性工作来抓,抓实、抓深、抓细。

开展质量培训及"质量月"活动

中国船舶集团组织举办4期质量问题归零培训班,各成员单位共计8000余人次参与培训;开展2020年"实施精细化管理、 实现高质量发展"主题"质量月"活动,深入推进质量宣传教育,全面贯彻落实精细化质量管理要求,为高质量发展提供 强劲动力。



成员单位群众性"质量月"活动



2020年,中国船舶集团狠抓质量管理提升,获得多项质量荣誉。七〇二所获江苏省省长质量奖,七一一所获上海市政府质量金奖,七一九所获湖北省长江质量奖。沪东中华造船(集团)有限公司踏浪而来 QC 小组获国际质量管理小组发表赛最高奖铂金奖,七〇一所变色龙 QC 小组等 7 个小组获全国优秀质量管理小组奖励,江南造船(集团)有限责任公司搭载二部 OTS 班组等 10 个班组获全国质量信得过班组奖励。通过质量创奖的推优树典,推动集团公司质量管理水平的整体跃升。





加强安全生产培训

中国船舶集团举办单位负责人、安全管理人员培训,宣贯国家安全生产法律法规和集团公司管理制度,共 284 人参加 培训并取得国防科工局安全资格证书;依托中国船舶工业安全生产培训中心举办安全资质培训,特种作业培训 200 余期, 培训 11893 人次;受疫情影响,首次启用安全在线培训平台,培训 1259 人次。



2020 年 6 月,中国船舶集团以"消除事故隐患,筑牢安全防线"为主题,在疫情防控常态化条件下,进一步强化落实 安全生产责任,开展"安全生产月"活动,持续推进本质安全建设。





中国船舶集团落实党中央、国务院的决策部署,统筹做好安全风险防范,加强特殊时期安全管控和应急处置工作。

大连船舶重工集团有限公司建立健全安全生产事故应急预案体系,设置专职救援队伍,定期开展应急演练,不断完善 安全应急保障,全力保障员工生命健康安全。









中国船舶集团贯彻落实国家关于推进生态文明建设、全 面加强生态环境保护、深入打好污染防治攻坚战的决策 部署,坚持绿色生产经营,发展绿色产业,提供绿色产 品和服务,为绿水青山贡献船舶力量。

推进绿色制造

贯彻国家精准、科学、依法治污的要求,将打好污染防治攻坚战的各项工作落地、落细、落小、落实,持续降低能源 消耗和污染物排放。



大力推广 VOCs 治理工作

大连船舶重工集团有限公司完成两个工场两喷五 涂喷漆厂房"沸石转轮+CO"试点项目的 VOCs 治理设备安装、单调、联调工作,已进入试运行 阶段。废气在线监测设备数据显示,VOCs 去除 率可达 99.47%。



小贴士: VOCs (volatile organic compounds) 挥发性有机物,是指常温下饱和蒸汽压大于 133.32Pa、常压下沸点在50~260℃以下的有机化 合物,或在常温常压下任何能挥发的有机固体或 液体。



山西平阳重工机械有限责任公司通过规范化的现场管理、建造危险废物贮存间等方式,对危险废物开展规范化管理。

规范现场管理,合规处置危险废物

开展危险废物专项治理工作,提升危险废物产生、贮存、转移等各个环节的现场管理水平。2020年,共分 10 批次委 托处置铬泥、废机油、铬酐桶、废油桶、废油漆桶等 12 类危险废物,处置量共计 94 吨。

提标改造环保设施,建立危险废物暂存间

2020 年,完成对原有两间汽车库改造,面积约 110 平方米,改造严格按照《危险废物贮存标准》防渗、防腐等要求实施,整体改造满足危废贮存管理要求,并已投入使用。



发展绿色产品

充分发挥科技创新优势,加大新能源动力船舶研发,推动绿色节能技术应用,降低产品对资源能源的消耗和对生态环境 的影响,积极打造"绿色品牌产品",为远洋航运业"碳达峰、碳中和"提供解决方案,为全球绿色发展贡献中国力量。



2020年1月,七一一所与上海市客运轮船有限公司签约承建世界首艘纯超级电容动力渡轮,为崇明世界级生态岛建设 及花博会举办提供绿色交通样板,为我国新能源内河沿海船舶提供全新示范应用。





2020年6月,七一一所为"新长江26007"号定制动力系统整体改造方案,采用混合动力多模式切换控制,应用变速 气体机组、直流组网等节能减排技术,氮氧化物排放降低 90% 以上,硫氧化物和 PM2.5 排放近零。





2020年11月,大连船舶重工集团有限公司设计建造的全球首艘翼型风帆助推 VLCC 项目 获得产品设计金奖,对中国船舶行业抢占国际大型船舶技术制高点、助力船舶行业转型升 级、促进大型船舶绿色节能发展具有重要意义。



2020年5月,中国船舶集团与广东省人民政府、中国海洋石油有限公司在京签署《广东省内河船舶 LNG 动力改造项目 合作框架协议》,针对珠江流域船舶污染治理需求,创新合作模式,共同推动广东省内河船舶 LNG 动力改造,创建内 河船舶污染排放治理工程示范,打造绿色珠江,实现生态、经济双赢。





2020年1月,七一一所研发的首台套自主品牌 8M23G 天然气发电机组成功并网发电,该机组每年将产生七百万度清 洁电力,为客户创收四百余万元,其成功并网发电标志着七一一所天然气发动机正式拉开市场应用序幕。



2020年7月,七一二所自主开发的国内首套催化燃烧供热脱氢装置样机一次开车成功,顺利完成调试,标志着有机液 体储氢工程化应用关键技术攻关取得重大突破。



提供绿色服务

坚持绿色发展理念,主动布局无污、无害、无毒的、有益于人类健康的绿色服务产业,推进绿色服务产业健康有序发展, 为建设美丽中国贡献力量。



雄安新区首艘环境应急监测船成功交付

2020年9月, 雄安新区首艘环境应急监测船"雄安监测一号" 完成交付,该船由七一二所整船承建。该船投运后将显著提升 新区对白洋淀水质监测能力、应对环境污染突发事件及污染事 故等应急监测及指挥调度能力,对新区生态环境绿色发展具有 重要意义。





中标 VOCs 处理系统及除湿、加热送风系统 EPC 总承包项目

2020 年 5 月,中船第九设计研究院工程有限公司中标上海振华重工(集团)股份有限公司长兴分公司 2000 亩新建油 漆车间 VOCs 处理系统及除湿、加热送风系统 EPC 总承包项目,采用新型"多转轮 +RTO"处理工艺,有效利用治理产 生废气余热。

国内首个船舶大气污染物立体监测系统投入示范运营

2020年6月,七一一所研制的国内首个船舶大气污染物立体监测系统在深圳盐田港大鹏湾投入示范运营。该项目团队

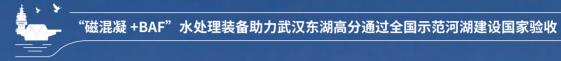


国内首台快速应急热脱附土壤修复装备下线

2020年7月,南京中船绿洲机器有限公司和江苏省环境科学院联合研发的国内首台快速应急热脱附土壤修复装备成功。 下线,为国内突发性小范围有机污染土壤快速修复提供了利器。



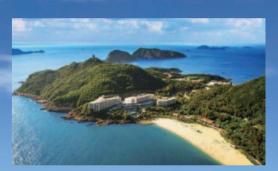
2020 年 9 月,七〇二所参与无锡新吴区太湖应急清淤工程,派出一艘普通环保绞吸船和一艘生态船至湖中作业,分别 用以清除湖底淤泥及近岸淤泥。



2020年12月,七〇四所中标武汉东湖污水处理项目,利用所里规模最大的污水处理装备"磁混凝+BAF"对庙湖、菱角湖、 喻家湖等子湖进行疏浚淤泥和尾水处理,出水水质达到《城镇污水处理厂污染物排放标准》(GB18918-2002)一级A标准。

完成珠海市大万山岛重点海湾整治工程设计任务

2020年12月,中船第九设计研究院工程有限公司完成珠海市大 万山岛重点海湾整治工程全部设计任务并通过专家评审。该项目 位于珠江口外最南端的大万山岛西北侧锦塘湾,地处开敞水域, 周边地形复杂,受风、浪、潮等自然条件影响大,对勘察、设计、 施工要求高。







中国船舶集团积极践行共享发展理念,关注客户、员工 等利益相关方诉求,广泛开展与合作伙伴的交流与合作, 提升员工归属感和幸福感,与各方共享发展成果。



积极与政府、金融机构、研究院所、高校、企业等机构建立广泛的合作关系,取长补短、互惠互利,营造良好合作氛围, 实现互利共赢发展。



银企合作

不断加强与银行、基金、证券等金融机构的沟通和合作,在互惠互利的基础上探索建立战略合作关系。





研企合作

积极推进产学研合作,加强与高等院校开展包括科研攻关、人才培养等方面的交流和合作,打破国外知识壁垒,促进行业发展。



企业合作

以产业为纽带,通过信息共享、业务协同、战略合作等,与相关行业、相关类型企业开展多种形式的交流和合作。



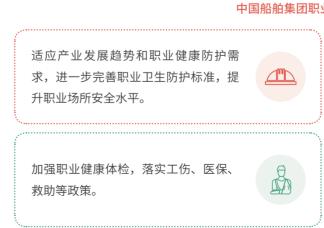
提升获得感,高质量发展成果惠及全体员工

中国船舶集团为员工创造包容、和谐的工作环境,搭建职业发展平台,关爱员工的健康和生活幸福,在帮助员工发展和 提升的同时实现可持续价值的增长。

保障员工权益

中国船舶集团坚持以人为本,致力与员工建立平等和谐的劳动关系,保护员工合法权益,满足员工合理诉求,持续为员 工营造平等、尊重、安全的工作环境。





新酬福利
按时足额发放员工薪酬,严格执行国家及地方社
会保障制度。
社会保险覆盖率 100%
(Red)
(人) 职业健康
严格执行国家职业安全健康法律法规,加强和完
善职业安全健康管理工作,保障安全健康的工作
环境。
员工体检率 健康档案覆盖率
100 % 100 %
· · · · · · · · · · · · · · · · · · ·
业病防治主要举措
上病防治主要举措
上病防治主要举措 强化对职业病风险的预防预控,严格报
强化对职业病风险的预防预控,严格报
强化对职业病风险的预防预控,严格报
强化对职业病风险的预防预控,严格报
强化对职业病风险的预防预控,严格报告制度,早发现、早报告、早处置。

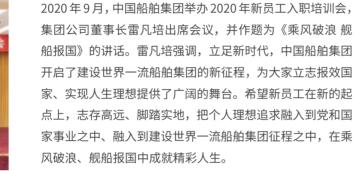
助力员工成长

中国船舶集团深入实施人才强企战略,完善人才培养机制,深化人才发展体制机制改革,助力员工成长成才。

员工培训

2020年,中国船舶集团先后组织举办总部部门和成员单位 副职、总部人员、高技能人才、型号"两总"、成员单位中 层干部、新入职员工等线上线下培训班,培训学员近万人次。 投入培训 **17881.34**万元 员工参与培训 **62**万人次







2020 年 10 月,中国舰船研究院 160 位博士、硕士研究生 毕业,其中 109 名毕业生进入中国船舶集团工作。







2020年10月,中国船舶集团举办中央党校国资委分校 2020年秋季处级干部进修班(中国船舶集团第一期中青年 干部培训班)。中国船舶集团党组高度重视年轻干部培养选 拔工作,把优秀年轻干部培养选拔作为一项基础性、战略性、 先导性工作,建立上下联动、长期关注的接续培养锻炼机制。

职业发展

畅通员工职业发展路径,完善以创新、质量、贡献为导向的人才选用机制、评价机制、培养机制和激励机制。





建立高级专家岗位体系,创新开展首批遴选工作,聘任 259 名高级专家。

以重大工程、重大项目为主阵地,选优配强型号"两总"队伍,不断优 化科技人才队伍结构。

完成新集团国家首批职业技能等级认定试点单位备案;申报国家首批产教融

关怀员工工作生活

中国船舶集团改善员工工作条件,举办各类文体活动,关注离退休员工身心健康,倡导健康生活方式,为中国船舶集团 可持续发展凝聚力量。



2020年1月,中国船舶集团迎来成立后首个新春联欢会,总部及在京单位职工欢聚一堂,喜迎新春佳节。









篮球赛

趣味运动会



为一线员工发放防暑降温茶叶、云南白药、烫伤膏、酒精等各类防暑降温、应急、防疫药品。







2020年1月,农历春节前夕,中国船舶集团党组成员分赴各地,看望慰问老同志,送上集团公司党组的问候与祝福。





2020年9月,为纪念中国人民抗日战争暨世界反法西斯战争胜利75周年,中国船舶集团多家成员单位组织走访慰问 革命老兵。





2020 年"六一"国际儿童节到来之际,中国船舶集团及各成员单位开展了形式多样的六一儿童节庆祝活动,收到了各 类职工子女才艺展示作品,包括绘画、书法、视频、感言等。中国船舶集团通过庆祝活动给予了职工子女更多的关爱, 让孩子们在关爱下茁壮成长。





我也要像海娃哥哥一样勇敢、 聪明,做爱国的好孩子!

忆苦思甜, 听爸爸讲小萝卜头的故事







职工子女作品——"抗疫英雄 职工子女作品——"和平方舟" 勇敢出发"



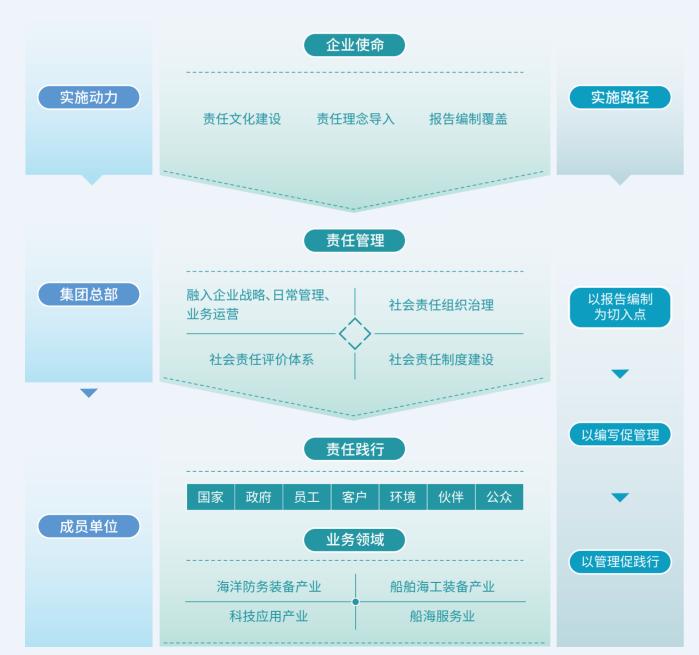
号医院船

责任管理

责任理念

秉承"引领行业发展、支撑国防建设、服务国家战略"的企业使命,逐步走 出一条以使命为引领的履责之路,并有意识地将社会责任融入企业战略与企 业文化,推动责任践行、开展责任管理,实现承担历史使命、履行社会责任 和推动企业可持续发展的有机统一。









中国船舶集团将主动与各利益相关方进行沟通交流,建立常态化的社会责任信息披露机制。通过在中国船舶集团官网 及官方微信平台披露社会责任信息,编制并发布年度社会责任报告等,传播社会责任理念与实践,提升社会责任影响力, 增强运营透明度。

	国家	<u></u> 政府	〇 0 〇 つ 员工	客户	合作伙伴	一 同行
我们的共同目标	 服务国防,优质高效 科技创新,引领行业 国有资产保值增值 带动就业,和谐发展 	• 遵纪守法 • 依法纳税	 基本权益保障 ・职业素质提升 ・广阔职业发展空间 ・归属感和认同感 	・优质产品和服务 ・认真履行合同 ・合作共赢	 ・ 恪守商业道徳 ・ 公开、公平采购 ・ 合作共赢 ・ 共同发展 	 ・公平竞争 ・产业发展
我们的沟通渠道	 ・定期工作汇报 ・参加相关会议 ・信息报送 ・中国船舶集团网站、报 刊、微信等 	 工作汇报 相关会议 函件往来	 ・厂务公开制度 ・对话机制 ・职工代表大会 ・满意度调査 ・探访慰问 	 ・中国船舶集团网站 ・合同协议 ・满意度调査 	 ・合同协议 ・合作研发 ・联合活动 ・日常沟通 	• 行业会议 • 协会 • 研讨会
我们的不懈努力	 ・创新型企业集团 ・转变经济发展方式 ・经济贡献 ・带动地方经济 	• 遵守法律法规 • 积极与各级政府部 门沟通	・建立完善酬薪体系 ・加大健康安全保障 ・建设人才工程	・提供优质、高效、安 全产品 ・定制化产品和服务	 ・执行公平透明的商业 原则和流程 ・公开招标采购信息 ・责任采购 	 ・ 引领行业发展 ・ 提升产业链价值 ・ 共享最新科技成果

」 环境	入社区
•绿色发展,节能减排 •节约资源 •清洁能源 •绿色办公	 参与社区发展 支持公益事业 提供就业保障
 ・中国船舶集团网站 ・资料报送 ・定期工作汇报 ・公开披露信息 	 ・合作共建 ・公益活动 ・社区参与 ・志愿者活动
 "资源节约型"企业 "环境友好型"企业 绿色产品和服务 发展绿色产业 	 ・定点扶贫 ・愛心助学 ・抢险救灾 ・鼓励志愿者行动

未来展望

2021 年是我国现代化建设进程中具有特殊重要性的一年,是我国实施"十四五"规划、开启 全面建设社会主义现代化国家新征程的第一年。集团公司将以习近平新时代中国特色社会主义 思想为指导,坚持稳中求进工作总基调,立足新发展阶段、贯彻新发展理念、构建新发展格局, 聚焦强军首责,壮大主业实业,深化创新驱动,深化整合融合,抓紧抓实集团公司全面深化改 革三年行动方案,强化精细化管理,提升党建质量,坚决完成好全年各项目标任务,确保"十四 五"开好局,全面推进集团公司高质量发展。

报告结尾

关键履责绩效表

指标	单位	2020
经济		
资产总额	亿元	8614
营业收入	亿元	3233
利润总额	亿元	167
净利润	亿元	145
纳税总额	亿元	96
科技		
研发资金投入	亿元	380
国家级创新平台	\uparrow	63
国家重点实验室	\uparrow	1
国家级工程技术研究中心	\uparrow	2
国家工程实验室	\uparrow	6
国家工程研究中心	\uparrow	4
国家企业技术中心	\uparrow	29
国家级研发中心	\uparrow	4
国防科技重点实验室	\uparrow	11
国防科技工业创新中心	\uparrow	4
国家级创新基地	\uparrow	2
申请专利	项	10281
其中发明专利	项	7896
发布国际 / 国家和行业标准	项	181
社会		
用工总数	万人	35.6
经济合同法律审核率	%	100
员工培训投入	万元	17881
员工培训人次	万人次	62
员工体检覆盖率	%	100
各类帮扶资金投入	亿元	1.45
环境		
万元产值综合能耗	吨标煤 / 万元	0.04
二氧化硫排放量	吨	339.35
氮氧化物排放量	吨	713.67
氨氮化物排放量	吨	83.17

报告指标索引

	标题	中国企业社会责任编写指南 (CASS-CSR4.0)	全球报告倡仪组织《可持续发展报告标准》 (GRI Standards)
	报告规范	P1.1, P1.2, P1.3, P1.4,P1.5	102-46, 102-50, 102-52, 102-53
	董事长致辞	P3.1, P3.2	102-14, 102-15, 102-16
	党组领导	M1.1, M1.2, M1.3	102-22, 102-23
ギエキの	董事会成员	M1.1, M1.2, M1.3	102-22, 102-23
关于我们	公司概况	P4.1, S1.6	102-8, 201-1
	组织结构	P4.2	102-3, 102-4, 102-6, 102-7, 103-2
年度责任专题 1:决战决胜,助力脱贫攻坚战全面胜利		S4.3, S4.5, S4.12, S4.13	102-29, 413-1, 415-1
年度责任专题 2: 1	众志成城,坚决打赢疫情防控阻击战	S4.11, S4.13	415-1
⊱ ∞−)	坚持党的领导	P3.1, P4.1	102-16, 102-26
会就发展蓝图	加强党的建设	P3.1, P4.1	102-16, 102-26
	建设世界一流船舶集团	P4.1, G1.1	102-14, 102-16
лІ	研制新型武器装备	М2	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	保障重大军事任务	M2, S1	
	积极支持海事装备建设	M2, M3	
山子山	船海产业实现增效升级	M2.1	102-2
	科技应用产业加快发展壮大	M2.1	102-2
聚焦主业实业	船海服务业持续做稳做实	M2.7, M2.8, M2.10, M2.12	102-2
	实施重大科技创新工程	M2.4, M2.7	102-2
<b>天志科技创新</b>	加强关键核心技术攻关	M2.4, M2.7	102-2
	助力主业实业转型升级	M2.1, M2.4, M2.7	102-2
	夯实科技创新基础能力	M2.1, M2.4, M2.6, M2.7	102-2
	资源重组整合,凝聚发展合力	S1.4	102-10, 102-15
全面深化改革	加快机制创新, 释放发展活力	S1.4	102-10, 102-15

	标题	中国企业社会责任编写指南 (CASS-CSR4.0)	全球报告倡仪组织《可持续发展报告标准》 (GRI Standards)
	规范董事会建设运行	M1.1, M1.2	102-24, 102-26, 102-27
£0303	深化降本提质增效	M2.1	102-29, 103-2
夯实管理基础	加强法治船舶建设	S1.1	102-16
	强化质量安全管理	M2., S2.11, S2.12, S3.2, S3.3	102-11, 103-2
× Øn	推进绿色制造	E1.1, E1.8, E.1.10, E2.4, E2.11, E2.12, E2.15	103-2, 302-3, 302-4, 305-4, 305-7
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### 意见反馈

#### 尊敬的读者:

您好!

感谢您阅读本报告。我们真诚地期待您对本报告进行评价,提出宝贵的意见,以便我们持续改进社会责任工作, 提高履行社会责任工作能力与水平!

谢谢!

中国船舶集团有限公司

2021年8月

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@ C55C

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# **2020** Corporate Social Responsibility Report

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# 2020

#### **Report Specification**

#### **Report Description**

For ease of expression and reading, "China State Shipbuilding Corporation Limited" is referred as CSSC or "we/ us" for short hereinafter.

#### **Report Scope**

This report covers the economic, environmental, and social performance of China State Shipbuilding Corporation Limited and its member units. The time scope of the report is from January 1, 2020 to December 31, 2020. Part of the content dates back to previous years.

#### Standards and Reliability Guarantee

Guidelines to Central Government-owned Enterprises on Fulfilling Corporate Social Responsibilities (No.1 [2008]) issued by State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

Guidelines to State-owned Enterprises on Better Fulfilling Corporate Social Responsibilities (No. 105 [2016]) issued by State-owned Assets Supervision and Administration Commission of the State Council (SASAC)

Guidelines on Social Responsibility Reporting (GB/T36001-2015) issued by Standardization Administration Commission of China

Guidelines for Compiling Chinese Cooperate Social Responsibility Report (CASS-CSR4.0) issued by Chinese Academy of Social Sciences

Sustainability Reporting Guidelines (GRI-standards) issued by Global Reporting Initiative (GRI)

ISO 26000 Guidance on Social Responsibility (2010) issued by International Standardization Organization (ISO)

2030 UN Sustainable Development Goals (SDGs)

For the disclosure of various indicators in this report, please refer to the index at the end of the report. CSSC guarantees the authenticity and accuracy of the reported information.

#### Data Source

The data used in this report is from CSSC official documents and reports, and sums of money are expressed in RMB unless otherwise specified.

#### Access to the Report

The report is published in simplified Chinese and English, in printed version and PDF electronic version. The report can be accessed or downloaded from CSSC's website www.cssc.net.cn or official WeChat account.



If you need a hard copy of the report, or if you have any suggestions and comments, please contact us in the following ways:

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On the occasion of the successful completion of the 10,000-meter deep sea trial and the successful return of the submersible "Fen Dou Zhe", I extend my warm congratulations and cordial greetings to all researchers who are committed to the research and development of deep-sea equipment and scientific research of abyss. The success of the development of the submersible "Fen Dou Zhe" and its sea trials indicate that China has the ability to enter the deepest part of the world's oceans to carry out scientific explorations and research. It also reflects China's comprehensive strength in marine high technology. From "Jiaolong" and "Shenhai Yongshi" to today's "Fen Dou Zhe", with a rigorous and scientific attitude and the courage to be self-reliant, you have practised a spirit of "discipline and practicality, unity and cooperation, struggle and dedication, as well as bravely scaling the world's heights in science and technology". This is the spirit of Chinese manned deep submarine diving.

This spirit has set a model for technological innovation. I hope you will continue to carry forward the scientific spirit, and bravely strive for the peak of deep-sea science and technology. I hope you will continue to work hard to accelerate the process of building China into a strong maritime nation and realize the Chinese dream of the great rejuvenation of the Chinese nation, and make greater contributions to human's understanding, protection and development of the oceans!



#### President Xi Jinping Sent a Congratulatory Letter on the Completion of the submarine Fen Dou Zhe's 10,000-meter-Deep Sea Trial and Return

On November 28, 2020, the New Deep-Sea Manned Submersible "Fen Dou Zhe" successfully completed the 10,000-meter sea trial and returned successfully. General Secretary of the Central Committee of the Communist Party of China, President of the State, and Chairman of the Central Military Commission Xi Jinping sent a congratulatory letter to extend his warm congratulations and cordial greetings to all scientific researchers who are committed to research and development of the deep sea and deep-sea equipment.

A Congratulatory Letter from President Xi Jinping on the Success of 10,000-meter-deep Sea Trial and Return of China's Full-oceandepth Manned Submarine Fen Dou Zhe

> Xi Jinping November 28th, 2020

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### **Chairman's Speech**



Lei Fanpei Chairman of the Board of Directors, Secretary of the Party Leadership Group 2020 is an extraordinary year for CSSC to have deepened integration and accelerated innovation and development under severe and complex situations. Over the past year, we followed the important instructions from General Secretary Xi Jinping as the fundamental principle. With the "two overall situations" and the top priorities of the nation in mind, we formulated and implemented high-quality development strategies, coordinating the control of the epidemic with scientific research, business running and production. Giving full play to the advantages of the Party construction, we also made great contributions to the building of a strong army and strong military equipment. We strengthened the development of primary industries and enhanced innovation-driven development. As a result, CSSC's responsibilities and missions are more focused, and the overall strength is more prominent. The operating performance continues to improve, and a solid step has been taken forward to a world-class shipbuilding group.

Keeping in mind the foremost responsibility of strengthening the army, we stay committed to the standard of combat effectiveness, improved the development system of warship equipment, innovate new models of equipment research and development ,and strengthened quality control of military equipment. We completed various tasks of equipment development with high quality on schedule, including the development of amphibious assault ships and large destroyers, which strongly supported the construction of a world-class navy.

Focusing on the primary business, we accelerated the upgrading of the marine industry. The large cruise ship was docked to assemble and 23,000-teu dual-fuel-powered container ships have been delivered in batches. Newbuilding order, completion and orderbook ranked the first in the world. We boosted the development of science and technology application industry, accelerated the growth of wind power industry, and expanded the layout of environmental engineering. Besides, we also deepened the transformation and adjustment of the marine industry. As a result, the value creation in leasing, finance, and material procurement became more prominent.

We accelerated innovation and development. The deep-sea manned submersible "Fen Dou Zhe" submersible successfully explored the 10,000-meter-deep sea. For the needs of strategic tasks such as marine safety, deep-sea scientific research and resource development, we planned, demonstrated, and implemented a number of major innovative projects such as deep-sea mineral resource development, deep and far sea aquaculture, offshore LNG industrial chains, large cruise ships, and marine low-speed engines. We continued pushing forward key core technologies.

We deepened reform and adjustment. We completed the reform of the headquarters' structure efficiently and steadily, established a differentiated management and control model, and further promoted the adjustment of industrial structure, optimization of capacity layout, and specialized reorganization. We have basically completed the major special reform tasks for the governance of loss-making companies and the separation of the non-core and non-dominant businesses. Major breakthroughs have been made in reforms in key areas such as market-oriented operating mechanisms and mixed ownership.

We strengthened refined management and launched a three-year action plan to build a world-class management system. We fully implemented the "cost-control project", optimizing the asset-liability structure and further strengthening the reduction and control of accounts receivable and inventory. In addition, we solidly promoted the legal governance, reducing disputed cases and bringing the increase of disputed cases under control. The headquarters' closed-loop management that complies with laws and regulations has basically formed. Member units also actively promoted the closed-loop management pilot program, which resulted in further prominence of auditing and risk management.

We practised the philosophy of green development. Implementing the emission target initiative, we adhered to green shipbuilding and continued developing green industries. We made great efforts to fight against poverty, helped Heqing County, Mengla County, and Qiubei County in Yunnan Province to get rid of poverty. We will continue to consolidate the achievements of poverty alleviation. Moreover, we cared for the professional development of employees, provided high-quality service to customers, and participated in social welfare undertakings. All these have demonstrated that CSSC is a responsible enterprise that takes social responsibilities actively and seriously.

The road ahead is long, and striving is the only way forward. 2021 is the first year of the 14th "Five-Year Plan". Adhering to the guidance of Xi Jinping's Thoughts on Socialism with Chinese Characteristics for a New Era, we will strengthen strategic guidance. We will create sources of original technologies, bravely leading modern industrial chains and boosting the major industries. We will also strengthen refined management and strive to improve quality and efficiency. We will fully fulfill political, economic and social responsibilities. We will carry forward the spirit of willing ox and pacesetters, accelerate the construction of a world-class shipbuilding group, and salute the 100th anniversary of the founding of the Communist Party of China with excellent achievements.

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### **About Us**

### Leaders of Party Leardership Group





Lei Fanpei Secretary of Party Leadership Group, Chairman





Qian Jianping

Member of Party

Leadership Group, Vice

General Manager

Sun Wei Member of Party Leadership Group, Vice General Manager



Jiang Renfeng Member of Party Leadership Group, Vice General Manager



Du Gang Member of Party Leadership Group, Vice General Manager



Li Jiaying Member of Party Leadership Group, Chief of Discipline Inspection and Supervision Group



Jia Haiying Member of Party Leadership Group, Chief Accountant



Sheng Jigang Member of Party Leadership Group, Vice General Manager





**Board Members** 



Lei Fanpei Chairman



Yang Jincheng Director







Zhao Xiaogang Outside Director

Yan Hua Outside Director







Wu Xiandong Outside Director



Li Shulei Outside Director



Zhang Yingdai Employee Director

### **Company Overview**

CSSC was established on November 26, 2019 by reforming the former China State Shipbuilding Corporation and the former China Shipbuilding Industry Group Co. Ltd. As a super large enterprise directly governed by the Central Government, the main businesses of CSSC cover industries of marine defence equipment, ship and offshore engineering equipment, science and technology application, and marine service.

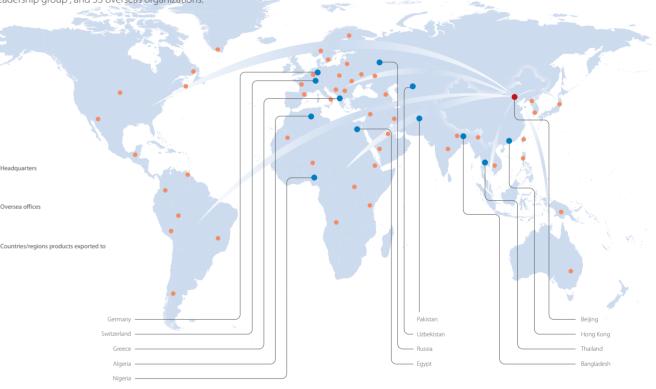
In 2020, CSSC's newbuilding order, completion and orderbook accounted for 23.3%, 19.4% and 21%, of the world's total, respectively, and the three major shipbuilding indicators ranked the first in the world.

In 2020, CSSC achieved revenue of 323.2 billion yuan, total profit of 16.7 billion yuan and net profit of 14.5 billion yuan. By the end of 2020, with 861.4 billion yuan assets and 356,000 employees, CSSC has become the world's No. 1 shipbuilding group, with its products exported to more than 150 countries and regions around the world.



### Organization

CSSC is composed of the Party Leadership Group, the Board of Directors, the Managers Group, the Discipline Inspection and Supervision Group and the headquarters and member units. The Party Leadership Group is established with the approval of the Communist Party of China Central Committee to discuss and decide major issues, and play a leading role in steering the direction, managing the overall situation, and promoting implementation of policies. The Board of Directors is the decision-making body responsible to the State-owned Assets Supervision and Administration Commission of the State Council and exercises its powers in accordance with the law. The Managers Group is the executive body which implements the resolutions of the Board of Directors in accordance with regulations and conducts production and operation. The Discipline Inspection and Supervision Group is a disciplinary inspection and supervision institution approved by the Communist Party of China Central Commission for Discipline Inspection and the National Supervisory Commission, performing disciplinary inspection and supervision functions in accordance with regulations and laws. The headquarters has set up 3 working organizations of the Party and 15 headquarters departments. Besides, the company has 36 scientific research institutes, 10 listed companies, a total of 113 member units under the management of the Party Leadership group , and 53 overseas organizations.







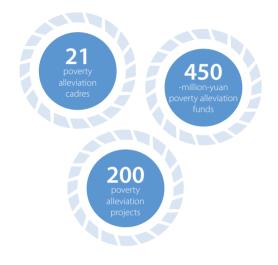


# A decisive battle and a decisive Annual Responsibility Topic Victory, to help win the fight against poverty

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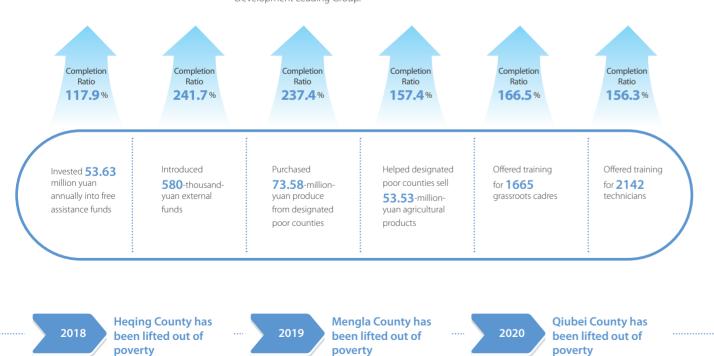
Lifting all rural residents living below the current poverty line out of poverty by 2020 is a solemn promise made by the CPC Central Committee, and it must be fulfilled on time. It is a tough battle of which greater importance must be attached to in the final push. It can only be achieved through unremitting efforts.



CSSC conscientiously implements the important decisions and deployments of the Party Central Committee on winning the battle against poverty, and implements the important instructions of General Secretary Xi Jinping on "True poverty alleviation" with a high sense of political responsibility. CSSC has steadfastly promoted designated poverty alleviation in Heqing County, Mengla County, and Qiubei County of Yunnan Province. During the Thirteenth "Five-Year Plan" period, CSSC sent 21 cadres to assist county construction, invested more than 450 million yuan, and implemented more than 200 assistance projects. More than 40,000 registered poor people had been lifted out of poverty and gained more income. By the end of 2020, Heging County, Mengla County and Qiubei County, paired assisted by CSSC, have all achieved poverty alleviation. This has made great contributions to the decisive battle against poverty.

#### **Targeted Poverty** Alleviation

In 2020, through "industry, product procurement, education, medical and health support, and infrastructure construction, cadre and technical personnel training", etc., CSSC has helped Qiubei County get rid of poverty from a multi-sectoral, all-dimensional and multi-level perspective, and has consolidated the achievements of poverty alleviation in Heging County and Mengla County. The achievements have exceeded the targets assigned by the State Council's Poverty Alleviation and Development Leading Group.









220 thousand external funds

> 26.52 million consumption poverty alleviation funds

#### Heging County in Dali Autonomous Prefecture, Yunnan Province

Since 2002, CSSC has implemented various poverty alleviation measures and established a series of policy systems such as industrial poverty alleviation, education poverty alleviation and health poverty alleviation, housing security, drinking water safety, infrastructure improvement, and capital integration, and CSSC has achieved remarkable achievements in these respects. A total of more than 78.88 million yuan has been invested into various free assistance funds, and 55.56 million yuan has been invested in consumption poverty alleviation. Moreover, 120 assistance projects have been implemented.

#### Mengla County in Xishuangbanna Autonomous Prefecture, Yunnan Province

Since 2002, CSSC has invested 47.34 million yuan in free assistance funds and impemented projects such as the founding of CSSC Mohan Shanggang Hope Primary School and CSSC Nakka Hope Primary School, promoting border market projects and the building of "happy bridges" and " prosperity roads" and donation of medical and health equipment, etc. The total procurement of various agricultural and sideline products is 48.51 million yuan and 100 million yuan was invested to initiate the establishment of Mengla Industrial Povery Alleviation Fund, for the investment of honey, rubber wood, Pu'er tea and other industrial projects to drive the development of local specialty industries.

#### **Qiubei County in Wenshan Autonomous Prefecture, Yunnan Province**

Since 2012, focusing on industrial poverty alleviation, CSSC has invested 100 million yuan in establishing the first county-level industrial poverty alleviation funds, and successively invested 94.39 million yuan in leading enterprises such as Yuntai Food, to help the development of distinctive industries. We have also invested more than 22 million yuan in road and traffic infrastructures to improve people's living conditions. Also, CSSC has invested more than 23 million yuan in projects, such as the construction of two Hope Primary Schools and one complex building, to prevent the poverty being passed down from generation to generation. Moreover, we have also vigorously carried out consumption poverty alleviation. In 2020, we purchased agricultural products worth of 45.49-million yuan from Qiubei County, and helped to sell products of 20.15-million yuan, letting the products "go out of the mountains".

----- Xi Jinping, General Secretary of the CPC Central Committee, Chinese President and Chairman of the Central Military Commission,

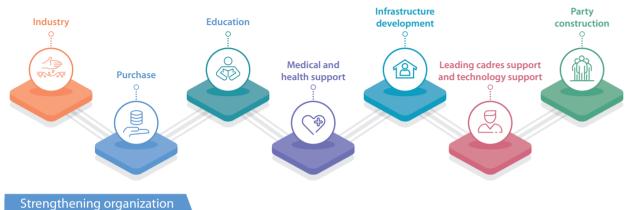






#### Creating the "CSSC Model" for poverty alleviation

CSSC insists on "True Alleviation of Poverty , Alleviation of True Poverty ". In accordance with the actual local conditions of Heqing County, Mengla County and Qiubei County in Yunnan Province, CSSC integrates multiple resources, promotes internal and external collaboration, and explores the seven-in-one integrated model for precise poverty alleviation, to solve completely the problems related to the basic production and life of the poor.



and leadership

CSSC organized nine conferences on poverty alleviation to formulate and advance 40 key tasks and projects for poverty alleviation in 18 areas in 2020. Chairman Lei Fanpei and General Manager Yang Jincheng attached great importance to these tasks and projects. They went to Qiubei County and Mengla County in Yunnan Province to check the progress of poverty alleviation to help coordinate and solve problems.



CSSC donated 5 infrared thermometers, 100 hand-held forehead thermometers, 420,000 masks and other epidemic prevention materials to Heqing County, Mengla County, Qiubei County in Yunnan Province and Xishuangbanna Autonomous Prefecture to help win the battle against the epidemic and poverty.

In accordance with SASAC's and other higher-level agencies' deployment, timely arrangements are made to implement antiepidemic relief and help sell unmarketable agricultural products.

> Strengthening antiepidemic assistance

CSSC dispatched 6 personnel to the designated poverty alleviation counties (villages) to take temporary posts, to push the implementation of assistance projects, actively participate in local reform and development, and support the poverty alleviation and local economic and social development.

> Strengthening management of temporary cadres

#### **Honors and Awards**

- ★ CSSC was consecutively rated "excellency" in the designated poverty alleviation assessment by the State Council's Poverty Alleviation and Development Leading Group
- ★ The case of "Continuing to Promote Industrial Poverty Alleviation and Enhancing Endogenous Development Motivation" was selected as one of the 50 best cases of targeted poverty alleviation in 2020 by the State Council's Poverty Alleviation Office.
- ★ Many of the appointed deputy county heads, first secretaries in villages or staff members of designated poverty alleviation counties have been awarded as advanced individuals for poverty alleviation at the provincial, ministerial, prefecture, and county levels for many times.

### Strengthening immediate

In line with the objectives and requirements in the Fixed-point Poverty-Alleviation Responsibility Agreement, CSSC took the initiative to pressurize, make arrangements in advance, and increase investment. The annual indicators were fulfilled in advance.

CSSC strengthened the promotion of targeted poverty alleviation. Achievements and deeds were published in mainstream media and new media, which aroused great repercussions and effectively promoted the positive image of the responsible

...**n** 

Strengthening publicity

central enterprises.

D-

- ★ CSSC was selected as one of the top 100 Chinese enterprises for poverty alleviation in 2020 China Enterprise Charity Forum.
- ★ CSSC Material Trading Group (Mengla) Co., Ltd. was awarded the "National Advanced Group for Poverty Alleviation".



### Strengthening management and

Giving full play of Mengla Industrial Poverty Alleviation Funds and Qiubei Industrial Poverty Alleviation Funds, CSSC signed agreements with Qiubei County Shuanglong Oil Company and Lidaer Company, and invested 15 million yuan in the two companies respectively to support the development of key projects; at the same time, CSSC completed the demonstration of two investment projects in Wanze Agriculture and Yunmen Rubber in Mengla County.

> Focusing on the establishment, progress and effectiveness of designated poverty alleviation projects, CSSC sent personnel to go to Heqing, Mengla and Qiubei for supervision and guidance, so as to give prompt feedback when problems are found, and urge the prompt solutions.

D

Strengthening supervision and inspection



In 2020, facing the double tests of resolutely winning the battle against the COVID-19 epidemic and the tough battle for scientific research, production and operation, CSSC resolutely and courageously implemented the decision and deployment from the Party Central Committee at critical moments. Where there were more difficulties and challenges, where CSSC stepped forward. In the end, CSSC resolutely won the double victories of epidemic prevention and control as well as scientific research, production and operation. CSSC fulfilled the original mission in the big tests.

# Actively responding to the decision and deployment from the Party Central Committee

At the outbreak of the COVID-19 epidemic, with strong political consciousness, CSSC stepped forward with quick responses, full participation, and careful deployments, demonstrating the strong sense of responsibility.

On January 25, 2020, General Secretary Xi Jinping presided over a meeting of the Standing Committee of the Political Bureau of the CPC Central Committee to make arrangements for epidemic prevention and control. On January 26, 2020, CSSC established a working group of leaders for epidemic prevention and control and founded affiliated offices to conduct research, deployment and implementation of detailed requirements of epidemic prevention and control. Thus, CSSC quickly established a working system for epidemic prevention and control, featuring the unity of the headquarters and member units, group prevention and control, and close coordination.

# Taking the industrial advantage, CSSC devoted every effort to fight for prevention and control of the epidemic.

CSSC took the initiative to make contributions to the prevention and control of the epidemic.

At the forefront of medical treatment, 521 medical staff from Hubei No. 672 Hospital Affiliated to CSSC Research Institute raced against time and fought continuously in the front line of the COVID-19 epidemic.



Pengli Technology Group from the Eighth Research Institute of CSSC and Hebei Hanguang Heavy Industry Co., Ltd. undertook the urgent task for research and development of key equipment for the production of medical materials. It took only 11 days to complete the development of prototypes of the N95 mask machine, the flat mask machine and the layering machine. They achieved the continuous supply of mass production equipment within 15 days, fighting the epidemic with a "wartime speed".







Wuchang Shipbuilding Industry Group Co., Ltd., Wuhan Marine Machinery Co., Ltd. and other units took their professional advantages to support the successful construction of Huoshen Mountain and Leishen Mountain hospitals, and fully assisted the transportation of anti-epidemic materials and supported the communities in the fight against the epidemic.



SITC General Aviation Technology Co., Ltd. organized the CSSC Control Anti-epidemic Air Rescue Team. Three helicopters were successively deployed to Wuhan, Wenzhou, Xiantao, Yichang, Huanggang and other places. The flight lasted 40 days, nearly a hundred hours, and transferred more than 100,000 pieces of first-aid supplies.



On February 17, the CSSC Party Leadership Group studies Xi Jinping's important speech on epidemic prevention and control.



# Active donations for anti-epidemic public welfare

At critical moments of the battle to prevent and control the COVID-19 epidemic, CSSC actively donated to anti-epidemic public welfare.

**C7** 

#### During the epidemic, CSSC organized various donations up to

61,484,700 yuan. CSSC donated 687,000 masks, 10,800 pieces of medical protective clothing, 5.7 tons of disinfectant solution, 21,000 bottles of hand-washing disinfectant, and 6 mobile medical waste incineration shelters





CSSC Cruises Technology Development Co., Ltd. sent masks and other anti-epidemic materials to Italian experts who were unable to return to work due to the epidemic.

#### **National Honors and Awards**

On September 8, 2020, the Grand National Honoring Conference for Fighting against the Epidemic was held in the Great Hall of the People in Beijing. The conference awarded advanced individuals, advanced collectives, outstanding national Party members, and advanced grassroots Party organizations nationwide. CSSC won awards for the advanced group and an advanced individual.



Award for Advanced Individual in the prevention and control of the epidemic in the national health system <Zhang Qi, Head Nurse of the third infection ward of Hubei No. 672 Orthopedic Hospital of Integrated Traditional Chinese and Western Medicine, affiliated to CSSC Research Institute>.



#### Steadily promoting the resumption of work and production

Faced with the severe situation, CSSC adhered to the work policy of "unchanged plans, unadjusted targets, undiminished tasks, and increased efforts". CSSC fully implemented measures for normalization of epidemic prevention and control, and made all efforts to resume work and production to catch up with progress and recover losses. CSSC succeeded in the overall return to the level of the same period last year within 3 months. Since the resumption of work and production, CSSC had no case of infection on the job or imported from overseas.



The assembly staff of Chongqing Gearbox Co., Ltd. were inspecting the surface of the box at 3 am.



The workshop of Chongqing Hongjiang Machinery Co., Ltd. was brightly lit at 1:30 am.

#### We are working in the early morning.

In June 2020, the scientific research and production of CSSC entered the busiest stage of tackling tough problems, and its member units set goals and worked assiduously for their goals. In order to seize the time and catch up with the progress, the majority of employees worked together to achieve the goal and completed the mission regardless of day and night.



An engineer from No. 704 Institute was still working hard late at night



At midnight, the experiment was still on in No. 710 Institute for a 100-hour uninterrupted system copy machine.



# Drawing a Blueprint for Development

Under the guidance of General Secretary Xi Jinping's important instructions, CSSC implements the new development concept and builds a new development pattern based on the new development stage. Keeping in mind with "the national development strategy for two priority areas " and the "priority of the nation's interests", CSSC firmly remembers that the shipbuilding industry is a cause of the Party and the nation. With clear missions, responsibilities and strategic blueprints, we will unify our thoughts and unite our efforts to make greater contributions to the development of the Party and the country.



### Adhering to Leadership of the Communist Party of China

We keep in mind that "the surname of central enterprises is the Communist Party of China". With in-depth understanding of the responsibilities and missions of CSSC in the overall development of the Communist Party of China and the nation, we will resolutely implement the important instructions from General Secretary Xi Jinping and various decisions and deployments from the Party Central Committee. We will try to transform the Party's political advantages into corporate competitive advantages and move forward firmly in the direction specified by the Party Central Committee.

#### Studying and implementing the spirit of General Secretary Xi Jinping's important instructions

We will adhere to the "first topic" system and take "improving political standpoint" as the top priority.

Through the study, we will deepen the accurate understanding and thorough implementation of Xi jinping's thoughts on Socialism with Chinese characteristic for a new era and deployments of the Communist Party Central Committee.



#### Persisting in giving full play to the political advantages of the Communist Party of China

With emphasis on the role of CSSC's Party leadership group in steering the direction, managing the overall situation and promoting implementations, We adhered to and improved the decision-making mechanism related to key issues. We held 51 Party Leadership Group meetings throughout the year and studied 402 issues, of which 121 major production and operation issues were discussed in advance and 281 decisions were directly reviewed. We promoted the in-depth integration of Party construction and work. We insisted on Party construction around the central work, and made the completion of the annual goal an important content of Party construction assessment.

We fully implemented in member units the leadership system of "two-way entry and cross-service". In this way, we effectively integrated Party leadership into all aspects of corporate governance, embedded corporate Party organizations into corporate governance structures, and enabled Party organizations to play their roles in an organized and institutionalized manner.



### **Strengthening Party Construction**

We unswervingly strengthened Party Construction by deepening the comprehensive and strict governance of the Party and promoting the implementation of the "two safeguards" system and mechanism by focusing on and strengthening Party construction, to further improve the political function and organizational strength of Party organizations, which effectively guaranteed high-quality development.

#### Carrying out the construction of the organization, system and team of the Party in an all-round way

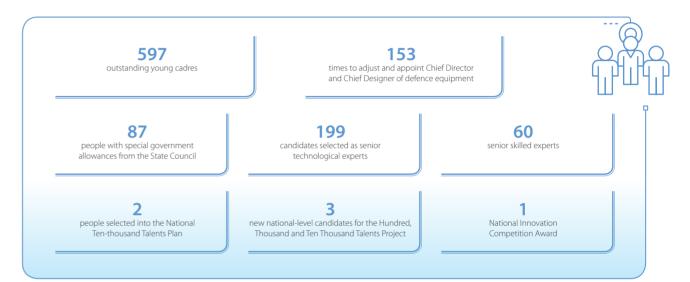
A series of Party construction organization systems such as the "Management Measures for the Party Organization Work of Member Units of CSSC (Trial)" was formulated, and Party construction has become more standardized and efficient. Lei Fanpei, Secretary of the Party Leadership Group, and members of the Party Leadership Group took the lead in giving lectures at the grassroots units. CSSC awarded a group of "Excellent CSSC Party Members", "CSSC Excellent Party Workers", "CSSC Model Party Branch", creating an intense competitive atmosphere.



- ★ Regulations on Management of Member Units' Subject Responsibilities for Strict Administration of the Party
- ★ Administrative Measures for Party Organizational Work of CSSC 's Member Units (Trial)"
- ★ Interim Measures for Assessment and Assessment of Subject Responsibilities of the Party Organization of
- ★ Administrative Measures for Assessment of Party Committee (or Party Leadership Group)Secretary's Work Report on Grassroots Party Construction (Trial)
- ★ Implementation Measures for Party Leadership Group (Party Committee) Central Group's Theoretical Studies
- ★ Implementation Measures for Democratic-Life Meetings of Party Members and Leading Cadres"

#### Strengthening the construction of cadres and talent teams

Adhering to the principle of the Party's management of cadres and talents,CSSC actively built a coordinated, unified, and effective system and mechanism for the selection, employment, education, and retention of cadres and talents. With close attention to the critical minority of leading cadres, CSSC strengthened the functions of the unified whole and optimized the team structure throughout the entire process of arranging the leadership teams of member units. CSSC adjusted and strengthened the leadership teams of 69 member units. Emphasizing the selection and training of outstanding young cadres, CSSC took stock of 597 outstanding young cadres, adjusted and appointed Chief Director and Chief Designer of defence equipment 153 times; 2 persons were added to the National Ten Thousand Talents Program, 3 national candidates to the Hundred, Thousand and Ten Thousand Talents Program, and 1 won the National Innovation Competition Award; 2 teams won the first National Defense Science and Technology Industry Outstanding Contribution Award; 87 people received special government allowances from the State Council; 199 people were selected Senior Technological Experts and 60 Senior Skilled Experts.



#### In-depth Development of Comprehensive and Strict Administration of the Party

For further reform of the disciplinary inspection and supervision system, CSSC supported the establishment of the disciplinary inspection and supervision team, which increased investigations and handling of cases, rushed to correct "four tendencies (namely, formalism, bureaucracy, hedonism and extravagancy)" and intensified promotion reform through cases. Also, CSSC intensified the central inspection and rectification and special rectification by carrying out continuous inspections and successfully completing two rounds of inspections of 38 member units.





### Building a World-class Shipbuilding Group

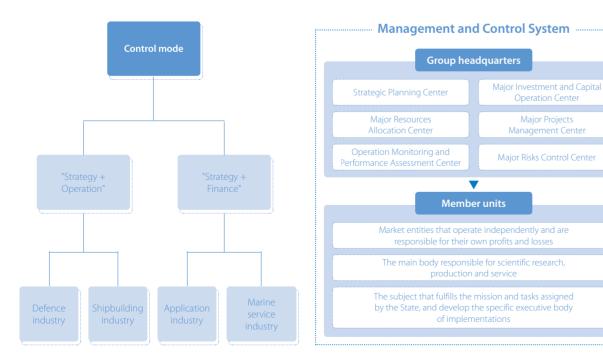
We accurately perceived the changes in the internal and external environment. Guided by the important instructions of General Secretary Xi Jinping, adhering to strategic guidance, we issued and implemented the "CSSC High-quality Development Strategy Outline", and strove to start a new journey of building a worldclass shipbuilding company.

On June 1, CSSC held its first strategic working conference and officially released the "CSSC High-quality Development Strategy Outline."

中国船舶集团有限公司第一次战略工作会议

#### Main contents of the "CSSC High-quality Development Strategy Outline."





Corporate mission
CSSC will lead the development of the industry support the construction of national defence and serve the country strategy



#### Marine Defence Equipment Industry

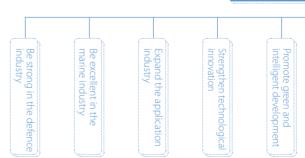
Based on shipbuilding and deep exploration of the ocean, CSSC will actively expand into the marine field, and comprehensively improve the development capabilities of marine equipment research and development, design, manufacture, support, and service for the entire industry chain.

~~ E	Science
	Applicat

#### Science and Technology Application Industry

CSSC will give full play to the advantages of technology application and equipment manufacturing. Focusing on promoting marine technology transformation and efficient use of existing resources,

CSSC will form a reasonable business structure to achieve better business development.



Implement the main responsibility and strengthen the mission

Organiza implem

Focus on strategic priorities and rationally allocate resources

es i	Strategic steps
nally lass ith a :ture, , and re.	By 2025, the gap with the world's leading level will be significantly reduced. By 2035, CSSC will basically grow to be a world-class shipbuilding group. By 2045, CSSC will be a internationally competitive world-class shipbuilding group.
try	Shipbuilding and Offshore Equipment industry As the main force in the scientific research and production of the country's marine defence equipment, CSSC strives to promote the inter- generational leap of naval weapons and equipment to provide strong support for building a world-class navy.
	Shipbuilding and Offshore Equipment Service Industry Focusing on strong military equipment and strong industries, CSSC will extend and expand the value chains of the industry, actively promote innovations in business models, and enhance the comprehensive competitiveness of the industry.
gies	
Expand service-oriented manufacturing	Promote high-quality Party construction Implement the strategy of talents Continue to deepen reforms Speed up the process of internationalization
on and	Strengthen organizational leadership and promote strategy implementation
ntation	

dynamic optimization and adjustment



# Performing the Primary Responsibility for a Strong Navy

As the main force of PLA Navy weapons and equipment construction in China, CSSC bears in mind the core mission to build strong armed forces and resolutely performs the primary responsibility for a strong army. CSSC will accomplish the military research and production tasks on schedule and with high quality, striving to provide first-class equipment and service guarantee for the construction of a world-class navy.

### **Developing New Weapons and Equipment**

By developing new management for the military industry, attaching great importance to the quality of military products, and strengthening organization and coordination, we accomplished the development of naval weapons and equipment of multiple models on schedule and with high quality.

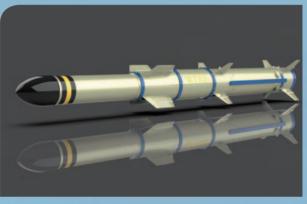












Accepting orders of aircraft carriers, destroyers, frigates, integrated training ships, torpedoes and other types of naval weaponry

### **Undertaking Major Military Tasks**

CSSC assisted the PLA Navy's successful accomplishment of numerous tasks, including visits, escort services, practice support by closely following the needs of tasks and strengthening services and safeguards.

#### Safeguarding ocean escort

Safeguarding the secure travels of the naval hospital ship Heping Fangzhou and other ships

PLA Navy's 33rd, 34th, 35th and 36th escort missions in the Gulf of Aden and the waters off the Somali coast







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### Equipment inspection and sea trials and tests

#### Taking part in equipment inspection in Shanghai, Zhoushan, Ningbo and other areas in the East China Sea

Services and safeguards of many tasks including warship sea trials, propulsion tests and debugging of weapons and equipment



### **Actively Support Shipbuilding Equipment Construction**

We gave full play to our professional advantages in R&D, design, construction and support service, pushing forward the development of multimodel and series of official vessels, such as marine surveillance and cruise salvage ships, making positive contributions to developing China into a major maritime power and safeguarding national maritime rights and interests.



The 10,000-ton patrol vessel "Hai Xun 09" was successfully launched

On September 29, 2020, designed by No.701 Institute and built by CSSC Huangpu Wenchong Shipbuilding Company Co., Ltd, with advanced equipment, comprehensive capacity, and the world's leading level, China's largest 10,000-ton patrol ship "Hai Xun 09" was successfully launched.





On July 22, 2020, the 2,000-ton large beacon vessel "Hai Xun 173" built by Wuchang Shipbuilding Industry Co., Ltd was formally delivered and authorized for service in Guangzhou. "Hai Xun 173" is so far the largest and most advanced beacon vessel in China's transportation system.





On May 20, 2020, built by Wuchang Shipbuilding Industry Co., Ltd, "Hai Xun 1110" and "Hai Xun 1111" were successfully delivered. This type of ship is the first medium-sized patrol ship of Hainan Maritime Safety Administration, equipped with a helicopter-lift platform, a bow thruster, a nonretractable fin stabilizer, a online information system and other advanced cruising equipment.







# Focusing on Major Industrial Business

Based on the industrial service for the country, CSSC advances the concentration of technology, talents, capital and other kinds of resources toward the major industrial business, and continuously expands to the middle and high end of value chains and industrial chains. As a result, the industrial structure is continuously improved and the competitiveness keeps soaring.



#### Word's First 23,000-TEU Dual-fuel Powered Container Ship

On September 22, 2020, the world's first 23,000-TEU dualfuel powered container ship, CMA CGM Jacques Saade was completed and delivered. It is the largest LNG-powered container ship in the world, equipped with the world's argest independently developed X92DF dual-fuel



#### 174,000m³ LNG Carrier

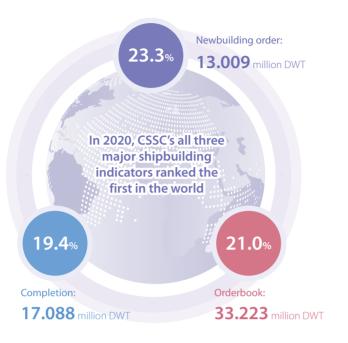
On August 31,2020, the 174,000m³ LNG PHECDA was completed and delivered. The ship adopts a new generation of dual fuel power system, and the product performance is synchronized with that of the world's top LNG carriers.

### Upgrading to Achieve Efficiency in the Shipbuidling Industry

We continue to push optimization of mainstream ship types, strengthen the research and development of high-tech ships, and accelerate the transformation and upgrade to the middle and high end. This leads to first-class products and services and a first-class brand. In 2020, newbuilding order, completion and orderbook respectively accounted for 23.3%, 19.4% and 21% of the world's total, ranking the first in the world in all three major shipbuilding indicators.

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**Building high-quality industrial chain** 



#### Research & Development

Focusing on green, intelligent, lightweight and far-reaching concept, we accelerated the improvement and upgrading of traditional ship types, thus launching a number of forward-looking products that lead the development of the market.

Auxiliary of shipbuilding

Centering around improving the overall added value of shipbuilding business, we accelerated the development of innovation. The world's largest marine dual-fuel low-speed machine was successfully developed independently, achieving batch order acceptance and continuous delivery, with the market share of ship ballast water equipment ranking the first in the world.

#### Production and construction

Centering on improving production efficiency and management, CSSC implemented Kanban management on marine business and target cycle management on main shipbuilding models. CSSC ranked the first in the world in the annual volume of shipbuilding completion. The delivery rate on schedule was significantly improved, and the key cycle time of some main vessel types was continuously shortened.

#### Marketing

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Affected by the COVID-19 epidemic, the decline of demand and the obstruction of personnel traffic, CSSC carried out online and offline marketing simultaneously, and maintained the world's first in the market share of new orders and order book.

Completion and delivery of 84000 m³ VLGC

On December 10,2020, the second 84,000 m³ VLGC (Very Large Liquefied Petroleum Gas Carriers ) built by Jiangnan Shipbuilding(Group) Co. Ltd was completed and delivered.

84,000 m³ VLGC, with the title of "Shanghai Brand", is the second generation of products independently designed by Jiangnan Shipbuilding (Group) Co. Ltd. This ship is 230.0m in length, 36.6m in molded breadth, 22.2m in molded depth, 11.4m in design draft and 12.0m in structural draft. This is also a typical "three high" (high technology, high difficulty, high value-added) ship type in the market.

### Delivery of the World's First Self-propelled FPSO

On August 31, 2020, built by Shanghai Waigaoqiao Shipbuilding Co. Ltd, the world's first self-propelled FPSO, also the second of the world's original Fast4Ward® "general-purpose" FPSO, was completed and delivered.

Compared with the first one, the biggest feature of this vessel is that it needs to design 2 separate propeller compartments in the aft part of the engine room, two more 3860Kw main generators and related auxiliary systems in accordance with the requirements of sailing vessels. It should conform to relevant maritime norms and requirements in overall arrangement, system configuration and equipment selection, making it the world's first large tonnage FPSO that can sail.





#### Delivery of 325,000-ton Ultra-large Ore Vessel



On April 20, 2020, built by Dalian Shipbuilding Industry Co. Ltd, the new generation of 325,000-ton ultra-large ore vessel "Tie Shan" was completed and delivered.

The pipes of the ballast system of the whole vessel are made of FRP, equipped with an exhaust sulfur-oxide scrubber and a LNG fuel reserve tank. The vessel is environmentally friendly, energy saving, safe and sturdy. With outstanding highlights, the overall performance reaches the world leading level.

Delivery of 300,000-ton Ultra-large Oil Carrier

On November 12, 2020, built by Dalian Shipbuilding Industry Co. Ltd, the 300,000-ton ultra-large oil carrier "Yuan Gui Yang" was completed and delivered.

With excellent hull lines, the ship is equipped with the G-type main engine (which is more energy-saving) and new large-diameter high-efficiency propellers, as well as the paddle front energy-saving device (which owns independent intellectual property rights). The energy-saving effect is obvious .



# Delivery of 49,000-dwt duplex stainless steel chemical tanker

On April 22, 2020, the completion and delivery of the 49,000 dwt duplex stainless steel chemical tanker built by Hudong-Zhonghua Shipbuilding (Group)Co. Ltd marked the perfect closing of the construction project of four vessels in the same series.

The ship is 182.88m in length, 32.2 m in molded breadth, 19.8 m in molded depth, 11.0 m in design draft, a maximum full load cargo weight of 1.67 tons per cubic meter and a ship capacity of 54,000 m³. It has 33 duplex stainless steel cargo holds, each with a pump, which can carry nearly a thousand chemicals and petroleum products, including petrochemicals, oleo-chemicals, vegetable oils, and lubricants.



# Delivery of 210,000-ton Bulk Carrier

On April 16, 2020, the 210,000-ton bulk carrier "ATLANTIC TIGER" built by Shanghai Waigaoqiao Shipbuilding Co. Ltd was completed and delivered.

The ship, which was classed by BV, adopted a new green and energy-saving design and had obvious advantages in speed, fuel consumption and cargo capacity compared with traditional Cape of Good Hope bulk carriers.



#### Delivery of the largest LNG bunker in the world



On April 30, 2020, built by Hudong-Zhonghua Shipbuilding (Group) Co. Ltd, the largest LNG bunker in the world was completed and delivered.

This ship is 135m in length, with the capacity of full service to the world's largest 23,000-TEU LNG-powered container ship and can cover 19,500 nautical miles from Europe to the Far East and back in a single bunkering. It is also capable of bunkering other dual-fuel powered cargo ships of various types.



Construction of the world's first 100,000-ton intelligent fishery large-scale breeding vessel started

In December 2020, Wuchang shipbuilding industry Co., Ltd held a ceremony to launch the construction of "Guoxin 1".

"Guoxin 1" is the world's first 100,000-ton intelligent fishery largescale breeding vessel, upholding the concept of green breeding and adopting the leading domestic and world-class vibration and noise reduction technology, which organically integrates the breeding space with the ship overall, and builds an ecological, efficient and intensive cabin breeding space.



#### Delivery of CJ50 Jack-up Drilling Platform



On January 15, 2020, the CJ50 jack-up drilling platform designed and built by Shanghai Waigaoqiao Shipbuilding Co. Ltd was completed and delivered.

The CJ50 jack-up drilling platform is one of the current mainstream jack-up drilling platforms, which is mainly used in offshore oil and natural gas exploration and extraction engineering operations. The platform has a pile leg length of 165m, a large hook load of 908 tons, a maximum drilling depth of 35,000 feet and an operating water depth up to 400 feet, and is listed in the American Bureau of Shipping (ABS).

# Release of world's largest marine dual-fuel low-speed engine

On May 26,2020, the world's largest marine dual-fuel low-speed engine developed by Winterthur Gas & Diesel Ltd was released online in the world.

Lei Fanpei, Chairman of CSSC, said that the WinGD X92DF main engine released to the world is the world's largest marine dual-fuel low-speed engine developed independently by CSSC, in response to the developing trend of green energy saving and low-carbon environment protection in global marine industry, closely focusing on customer needs. This marks a new step in CSSC's power development, manufacturing and service capabilities, thus injecting new momentum into the development of the global marine shipbuilding industry. In the future, CSSC will strive to provide more efficient, energy saving and green ship products and better services to global customers, further deepen and expand cooperation with all parties, jointly promoting the sustainable and healthy development of the global maritime industry.

The rated power of the model reaches 63,840 kilowatts. Integrating ultra-high power, intelligent control and green environment protection, its performance and emission indexes reach the world-class level. By adopting advanced technologies such as the Otto cycle principle and low-pressure gas intake in gas mode, this model can meet the most stringent International Maritime Organization (IMO) Tier III NOx emission standards.





In November 2020, the ultra-large fin stabilizer developed by No.704 Institute was successfully delivered, which marks the official launch of the largest fin stabilizer on the international market.

After more than 10 years of research and development by No.704 Institute, the ultra-large fin stabilizer broke through a number of key technologies and developed the flap fishtail fin, which generates 8% more lift than the flap fins commonly used abroad in the same area and speed, owning independent intellectual property rights and reaching the international advanced level.







In August 2020, the LGIP dual-fuel low-speed machine produced by Chongqing Hongjiang Machinery Co., Ltd completed the entire production and assembly process, and was successfully shipped to the OEM for installation.

The LGIP dual-fuel low-speed machine is a new type of marine engine which is mainly fueled by clean energy LPG. It can reduce NOx emissions by nearly 80% and SOx emissions by 90% -100% after installation and operation. Thus, it can meet the latest sulfur restrictions without installing a desulfurization tower. In addition, its particle emissions can be reduced by 90%, CO₂ emissions by 13%-18%, and the ship's Energy Efficiency Design Index (EEDI) can be improved by 13%-20%, which has significant advantages in green emission reduction.





Successful development of deep sea battery for Fen Dou Zhe (a deep-sea manned submarine)

On November 28, 2020, the deep-sea manned submarine Fen Dou Zhe completed the ten-thousand deep sea trial and returned successfully. The 11,000m deep-sea battery developed by No. 712 Institute is one of the key technologies of the ten thousand-meter manned submersible, which provides the power required for the operation of the submersible.

The safety and reliability of the 11,000m deep-sea battery has been fully tested. Its success has solved the basic theoretical problems of the deepsea battery from common technology to system integration, which systematically improved China's deep-sea battery design, manufacturing and testing capabilities, and filled the gap of lithium-ion battery for China's all-seas deep submersibles.

Successful development of high efficiency permanent magnetization drive system for electric anchor capstan

On December 28, 2020, No.712 Institute's successful development of high efficiency permanent magnetization drive system for electric anchor capstan enabled China to achieve independent innovation in the new generation of key drive equipment for berthing large ships.

This type of high efficiency permanent magnetic machine is used in the power unit of the anchor capstan of large luxury cruise ships, which can realize constant tension operation according to the requirements of winch throwing, raising and closing anchors, with the remote control function. Compared with the traditional hydraulic winch, the electric winch is smaller and lighter, with many other features such as high system efficiency, simple structure and easy maintenance.





CSSC signed an agreement with Qatar Petroleum to build LNG carriers

On April 22, 2020, CSSC and Qatar Petroleum jointly signed the Deed of Agreement of Ship Construction Capacity and Options to Purchase LNG Carriers in Beijing, Shanghai and Doha in the form of "Cloud Signing", with the total order volume of more than 20 billion yuan.







On January 9, 2020, Jiangnan Shipbuilding (Group) Co., Ltd. held the signing ceremony for the construction contract, leasing agreement and ship charter for the project of two 98,000m³ B-compartment VLEC in Shanghai. The VLEC is the largest VLEC ship with the largest cabin capacity in the world, as well as the largest liquefied gas ship capable of navigating the Houston waterway, with a maximum capacity of 99,000 m³.





#### Signing Contract for Construction of Three 174,000m³ LNG carriers

On June 30, 2020, Hudong-Zhonghua Shipbuilding (Group) Co., Ltd. and United Liquefied Gas Shipping Hong Kong Co., Ltd. signed the contract for the construction of three 174,000 m³ LNG carriers. The signing ceremony was successfully held in the form of "Cloud Signing" via video link between Beijing and Shanghai.





#### Received Order of Twelve 120,000-dwt Dual Fuel Tankers.

On April 29, 2020, CSSC Trading Co., Ltd., Shanghai Wai Gaogiao Shipbuilding Co., Ltd., Guangzhou Shipyard International Company Limited and Bocom Financial Leasing Co., Ltd., the division of Bank of Communications Co., Ltd., signed the contract in the form of Cloud Signing for the construction of twelve 120,000-dwt dual fuel tankers in Beijing, Shanghai, Guangzhou, Hong Kong, and the total contract volume is about 4.6 billion yuan.



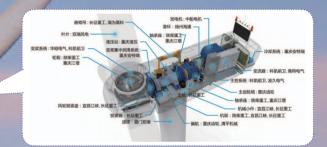


### Acceleration of the Development and Expansion of the Science and **Technology Application Industry.**

Through strengthening, cultivating, incubating and withdrawing, significant progress was made in clean energy equipment, emergency equipme electronic and informational equipment, environmental protection equipment, infrastructure and engineering equipment, and new materials, etc.



# Glance of CSSC Wind Power Industry













Construction of the First Offshore Wind Power Industrial Base in Guangxi Province

On November 26, 2020, the construction of the offshore wind power industrial base of CSSC Guangxi was officially started in Qinzhou. The project mainly constructs two 100,000-ton gravity wharves. It is planned to be completed and put into operation in June 2022, with a 40,000-ton slide and a 20,000-ton slide, supporting the construction of steel pretreatment lines, structural workshops, process pipeline workshops, etc.

The industrial base covers all core elements of offshore wind power equipment, including research and development, design, key equipment manufacturing, accessories, assembly integration, offshore installation and construction, and life-cycle operation and maintenance. The base covers an area of about 2,640 mu, with a total investment of about 12.9 billion yuan. The annual capacity of the base will be 1.5 million kilowatts of offshore wind power equipment manufacturing, installation, construction, operation and maintenance, and is expected to reach an annual output value of about 50 billion yuan.



#### Signed Framework Agreement for Hydrogen Energy Projects

In November 2020, No.718 Institute and Dongfang Electric Co., Ltd signed an agreement which indicates that the two parties would carry out regional cooperation in fields of hydrogen energy development, investment, construction and transportation, equipment production and manufacturing, to jointly promote high-quality development of the hydrogen energy industry, to establish long-term strategic partnership, and to further deepen the development of the hydrogen energy industry.



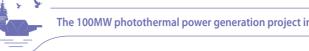


#### Delivery of China's first Floating LNG Storage and Regasification Unit Project

On September 15, 2020, Hudong-Zhonghua Shipbuilding (Group) Co., Ltd completed and delivered China's first LNG-FSRU(Floating LNG Storage and Regasification Unit) Project. This is the first time that a Chinese shipbuilding company has entered the field of refitting large and difficult LNG offshore equipment in the world.

Through a series of technical and structural modifications, Hudong-Zhonghua Shipbuilding (Group) Co., Ltd. successfully upgraded and equipped the original ship with five major systems, thus transforming it into a high-quality LNG-FSRU special carrier with multiple functions such as LNG reception, storage, transport, regasification and export.





On December 16, 2020, CSSC New Energy Co., Ltd. 's 100MW trough photothermal power station project at Urat Middle Banner successfully achieved full load power generation.

Ulat 100MW solar thermal power generation project started construction in July 2018. It was one of the first 20 demonstration projects of the National Energy Administration. It is also the largest truss-type solar thermal power station with the largest installed capacity and the largest heat storage scale in China. The total area of the project is about 7500 mu, and 375 trough heat collecting loops were installed.



# Success of the First Set of Domestic Acetylene Screw Compressor Unit

In October 2020, the first set of domestic acetylene screw compressor unit developed and produced by No.711 Institute was successfully put into operation.

No.711 Institute worked on imported acetylene cracked gas compressors and vacuum compressors for domesticalization and targeted at designing a new model suitable for acetylene gas to end the long-term monopolization of imported acetylene screw compressors.

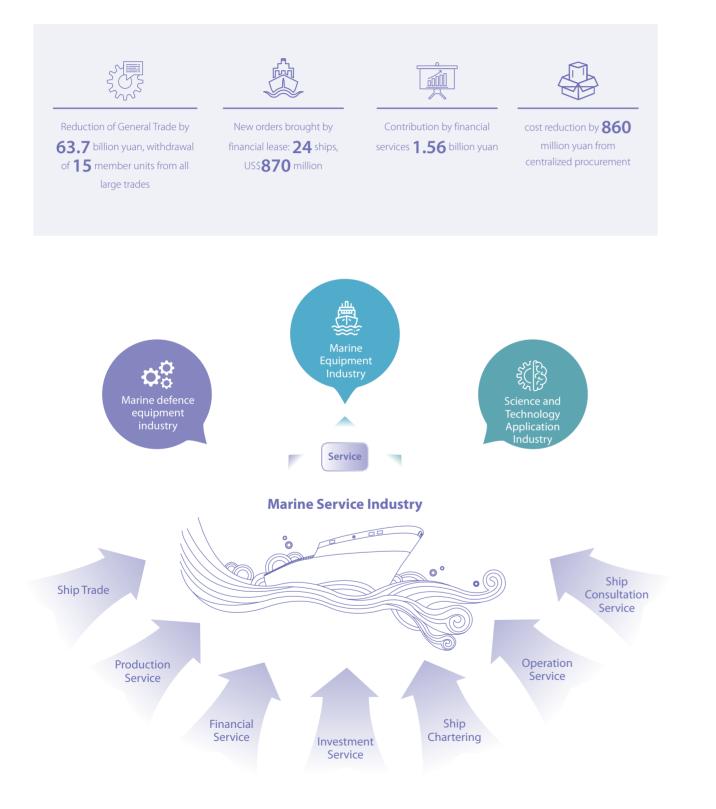


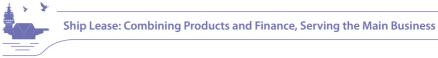
#### The 100MW photothermal power generation project in Urat Middle Banner achieved full load power generation



### **Actively Promoting Marine Service**

Closely focusing on and serving the defence industry, the marine industry and the science and technology application industry, we actively developed marine services, such as ship trade, financial services, investment services, leasing services, production services and shipping operation, and continued to extend and expand the industrial chains and value chains.





In 2020, CSSC (Hong Kong) Shipping Release Company Ltd (with joint ventures and associated companies included) signed contracts for 31 new ships, with contract value of US\$1.122 billion.



CSSC Supply Co., Ltd. has 10 storage-and-distribution bases and 4 steel-process-and-distribution centers. In terms of steel for high-performance offshore platforms and steel for deep-sea pressure equipment, we have cooperated with domestic iron and steel enterprises to make technical breakthroughs, to establish professional platforms for ensuring supply and service, to reduce the cost of steel procurement, warehousing and handling, pre-processing, logistics and transportation, to lay a good foundation for the overall competitiveness of the industrial chain from the source, and to promote the transformation of shipbuilding to the international advanced shipbuilding model of final assembly.



In order to fully support the resumption of work and production at member units of CSSC and strengthen the financial assistance to enterprises, CSSC Finance Company reduced the loan interest rate and increased the deposit interest rate. Intermediary services such as bill acceptance, letter of guarantee and entrusted loan are free of fees and margin, providing low-cost financial support to member units to the maximum extent. While supporting and safeguarding the competitiveness of the industrial entities, CSSC Finance Company obtains a sustained and stable return from investment.



CSSC Ninth Design and Research Institute (NDRI) Engineering Co., Ltd. has completed a number of urbanization and affordable housing projects in Shanghai, Shandong, Jiangsu, Zhejiang, Fujian and other places, which has achieved good social and economic benefits.



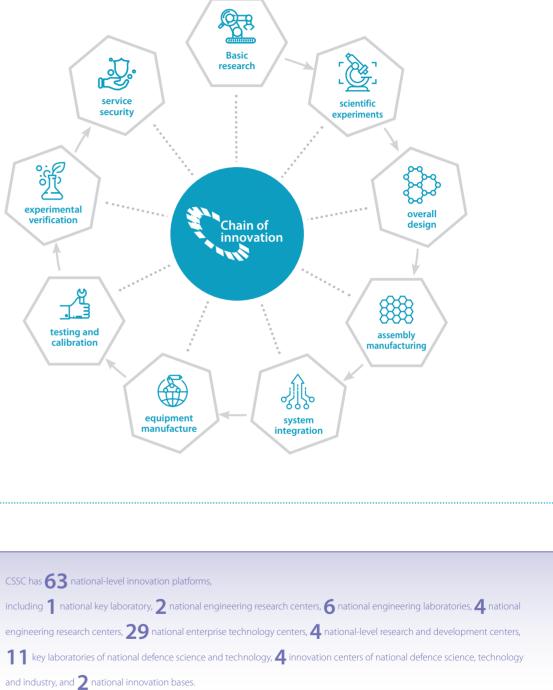
CSSC has 36 research institutes and 63 national innovation platforms. It has already basically covered basic research, scientific experiments, overall design, assembly manufacturing, system integration, equipment manufacture, testing and calibration, experimental verification and service security of the whole innovation chain of the shipbuilding industry, leading to a relatively perfect system of science and technology innovation.



# **Commitment to scientific and** technological innovations

a world-class shipbuilding corporation, through implementing significant and application of core technology and deepened the transformation science and technology of the shipbuilding industry. We will strive to build the "source of original technology" and extend the length of "chains" for China's shipbuilding industry, and make contributions to the self-reliance and self-improvement of the shipbuilding industry and the construction of a powerful country in science and technology.

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CSSC has **63** national-level innovation platforms,

## **Implementing Key Innovation Projects of Science and Technology**

Aiming at the world's forefront of science and technology, in the field of economics, for major national needs, CSSC took initiatives to coordinate the demonstration and implementation of 16 key innovation projects of science and technology, with the constant emphasis on the role of key projects of science and technology as the driving force.



The deep-sea manned submersible "Fen Dou Zhe" successfully completed its 10,000m sea trial and returned victoriously

Starting from October 10, 2020, the deep-sea manned submersible "Fen Dou Zhe" developed by No. 702 Institute carried out a 10,000m sea trial in the Mariana Trench. On November 10, it successfully landed at a depth of 10,909m, setting a new record for China's manned deep-sea submersible and marking that China has reached the world's leading level in the field of large depth-manned deep-sea submersibles.

CSSC fully mobilized and co-ordinated all research forces in the process of developing "Fen Dou Zhe" and made breakthroughs in key technology related to the overall design and integration on deep manned submersibles, design of rapid dive and integrated optimization of underwater navigation performance, and long-life stable power supply. CSSC overcame all kinds of challenges such as the deep high pressure under extreme conditions, with the overall domestication rate of over 96.5%. During the sea trials, 24 dives of 10,000m were made from "Fen Dou Zhe", accounting for 50% of the world's total 10,000m dives.



In January 2020, the world's first civil extremely-low-frequency high-power electromagnetic wave transmitter was completed. It was designed and built by the collaboration of China Ship Research Institute, No. 722 Research Institute and other corporations.

The transmitting station has a detection radius of thousands of kilometers and a detection depth of 10 kilometers, forming a signal source of electromagnetic waves with a high signal-to-noise ratio (SNR), and extremely low frequency that can cover all China's lands and seas.



## Strengthening Research on Key Technologies

Focusing on research and development of technology, CSSC increased investment in research and development of technology, deepened research on key technologies such as light weight, high energy efficiency and new energy application for civil marine engineering products, and created high-quality mainstream ship types.



On February 22, 2020, Shanghai Waigaoqiao Shipbuilding Co., Ltd. was awarded "Shanghai Smart Factory", as one of the first 20 factories that received the title.







Most Advanced Lifting-lug Intelligent Workstation in Shipbuilding Industry



In July 2020, Jiangnan Shipbuilding (Group) Co., Ltd. officially launched the first robot-operating intelligent production line, namely the lifting-lug intelligent workstation.

Jiangnan Shipbuilding (Group) Co., Ltd's lifting-lug intelligent workstation is the most advanced production line in the shipbuilding industry, which integrates robot vision recognition, intelligent gripping and intelligent welding technologies for the first time in the shipbuilding industry. The production line can significantly reduce the labor demand, compressing the original team of 27 members to 5, while maintaining the stability of the production guality of the lifting lug.



Two New Ship Types Awarded Digital Ships and In-Principle Approval Certificate from Lloyd's Register of Shipping

On October 16, 2020, the intelligent VLGC and NH₃-powered VLGC developed by Jiangnan Shipbuilding (Group) Co., Ltd. were awarded Digital Ships and Approval In-Principle Certificate (AIP) respectively by Lloyd's Register of Shipping (LR).



### Intelligent VLGC---"intelligent JNIS system"

Adopting an integrated platform for data collection and processing, equipped with reliable intelligent APPs for ship energy efficiency management, intelligent navigation, health status diagnosis of cabin equipment and liquid tank enclosure system, and comprehensive monitoring of electrical system, the system can effectively help shipowners improve ship safety, reduce energy consumption, and simplify shipping management.

### New energy fuel - "NH₃ fuel" power certification

NH₃, as a nitrogen-hydrogen compound, is easy to be stored and transported. It has a stable supply, and does not produce the greenhouse gas--carbon dioxide when burned. Therefore, NH₃ fuel-powered LPG carriers can effectively reduce carbon and sulfur oxide emissions and achieve true "zero" emissions. This NH₃-powered VLGC certification is the latest attempt of Jiangnan Shipbuilding(Group) Co.,Ltd. after the development of LNG, LPG and ethane dual-fuel powered LPG carriers.

## Assistance in transformation and upgrade of the main industry

CSSC insisted on leading the high-quality development of the main industry with scientific and technological innovations, solidly promoted the transformation and upgrading of ship and offshore equipment products and breakthroughs in the research and development of advanced equipment. CSSC continuously improved the quality of scientific and technological supply and accelerated the advancement of ship and marine equipment to the middle and high end of the global value chain.

## Released the Action Plan for Upgrading CSSC Shipbuilding and Marine Products (2020-2022)

The Action Plan for Upgrading CSSC shipbuilding and Marine Products (2020-2022) clearly states that the target of upgrading shipbuilding and marine products is to reduce the empty ship weight of main ship types by 1-3%, reduce the number of structural components by about 5%, reduce fuel consumption by more than 5%, and make all ship types meet the second stage of EEDI requirements. Civilian ships should complete the R&D and upgrade of 64 types of products in 5 categories, including the three mainstream ship types and liquefied gas carriers. Marine engineering equipment should complete the R&D and upgrade of 18 types of products in 4 categories, including jack-up and FPSO.



## China's First Large Cruise Ship Moves to a New Stage of Continuous Loading and Assembly in Dock

On November 10, 2020, the much-anticipated China's first large cruise ship reached a milestone in Shanghai Waigaoqiao Shipbuilding Co.,Ltd. It moves to a new stage of continuous loading and assembly in dock.

The cruise ship has a total length of 323.6 meters, a width of 37.2 meters, 2125 staterooms, and a maximum capacity of 5246 passengers. As the "jewel on the crown" in the shipbuilding industry, the large cruise ship is the only high technology and high value-added shipbuilding product that has not been exceeded in China, and shipbuilding of this cruise is a veritable giant system project.



On June 2, 2020, the world's largest and most environmentfriendly luxury ro-ro passenger ship built by Guangzhou Shipyard International Co., Ltd. started operation.

The ship is 237m long, 33m wide, with a service speed of approximately 23.5 knots and is classed by RINA; it has 534 cabins with a capacity of 2,370 passengers and a cargo lane of 3,850m. Designed with a series of green systems, it is equipped with the latest generation of hybrid scrubber system, and it can be converted into a LNG-powered ship.



On 23rd June,2020, CSSC released the Action Plan for Upgrading CSSC Shipbuilding and Marine Products (2020-2022)



## Consolidating the Basic Capacity of Innovation in Science and Technology

CSSC increased its efforts in applied basic research, accelerated the layout of research on forward-looking technology, made major breakthroughs in leading original achievements, and actively acted as a national strategic force of science and technology for the shipbuilding industry.





National Honor for "Fen Dou Zhe" 10,000m manned submersible R&D team

In December 2020, the research and development team of 10,000-meter manned submersible "Fen Dou Zhe" of CSSC was awarded the title "Model of Central Enterprises" by the Party Committee of State-owned Assets Supervision and Administration Commission of the State Council, and the "Chinese Youth May Fourth Medal Collective" by the Central Committee of the Communist Youth League and the All-China Youth Federation. Zhang Wei, a senior engineer of No. 702 Institute was also awarded the "Chinese Youth May Fourth Medal".



## Formation of Scientific and Technological Committee

On August 10, 2020, the Science and Technology Committee of CSSC was formally established, with 31 academicians of the Chinese Academy of Sciences and the Chinese Academy of Engineering, 4 senior experts in related fields serving as advisors and special advisors.

The establishment of Science and Technology Committee is an important work of CSSC to comprehensively implement the spirit of important instructions of General Secretary Xi Jinping and the decision and deployment of the central government and to promote the joint restructuring and integration of former China State Shipbuilding Corporation and former China Shipbuilding Industry Group Co.,Ltd. It is an objective requirement for the company to adhere to the new development concept and promote high-quality development; it is a practical need for the company to adhere to the problem-oriented approach, strengthen the bottom and make up for the shortcomings. It is also an important measure to strengthen the control of the main industry and improve the construction of the control system of the parent and subsidiary companies, which is of great significance to the construction of a world-class shipbuilding group.



In January 2020, Huang Xuhua received the highest National Science and Technology Award. Huang is Chief Designer of China's first generation nuclear submarine, Academician of the Chinese Academy of Engineering, Honorary Director of No.719 Institute, and Recipient of the Medal of the Republic.

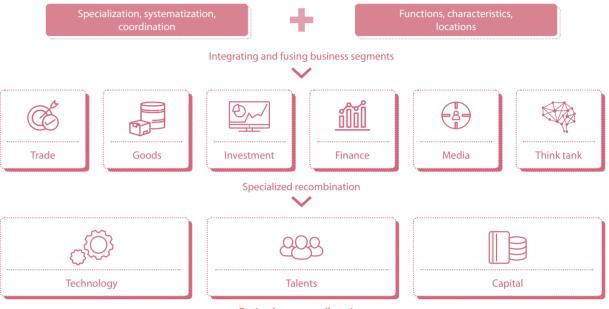




ughout 2020 to steadily and efficiently cturing and integration Hence, led by the general strategy, ened integration and fusion by taking full advantage of the ct of "1+1>2" to achieve high-g ality development.

## **Reorganizing and Integrating Resources, Cohering Development Synergy**

In accordance with the philosophy of development by professionalization, systematization and coordination, CSSC integrated and fused business segments according to the functions, characteristics and locations of each member unit. In this way, CSSC promoted the optimal allocation of various resources, such as technology, talents and capital, through regionalization and recombination reforms of entities in the fields of trade, materials, investment, finance, media, and think tank.





**Optimal resource allocation** 

**Special Rectification of "Institutionalization** of Headquarters" Problem

To build a professional, capable and efficient first-class headquarters, in combination of the special rectification of "institutionalization of headquarters", CSSC established the positioning of the Strategic Planning Center, the Major Decision-making Center, the Capital Operation Center, the Major Project Management Center, the Operation Monitoring and Performance Evaluation Center, and the Major Risk Control Center.

CSSC completed the reformation of headquarters institutions smoothly and efficiently, reducing the number of headquarters departments by 18% and the size of headquarters staff by **17.8**%, which ultimately resulted in a headquarters cadres and talents team with moderate size, reasonable structure and integrated culture.

The number of enterprises and institutions was reduced from **147** to **113**.

### Launching the Reform Program

In November 2020, to implement the major decision of the State-owned Assets Supervision and Administration Commission of the State Council on the three-year action plan for the reform of state-owned enterprises, CSSC issued the Three-Year Implementation Plan for Comprehensively Deepening Reform (2020-2022) of CSSC. According to the Plan, by 2022, the main task of recombination and integration will be basically completed, the staged development target of the 14th Five-Year Plan will be accomplished, the economic indicator will be steadily increased and the development quality will be greatly improved.

The Plan specified 10 aspects, 33 fields and 200 reform measures, of which all 80 reform tasks

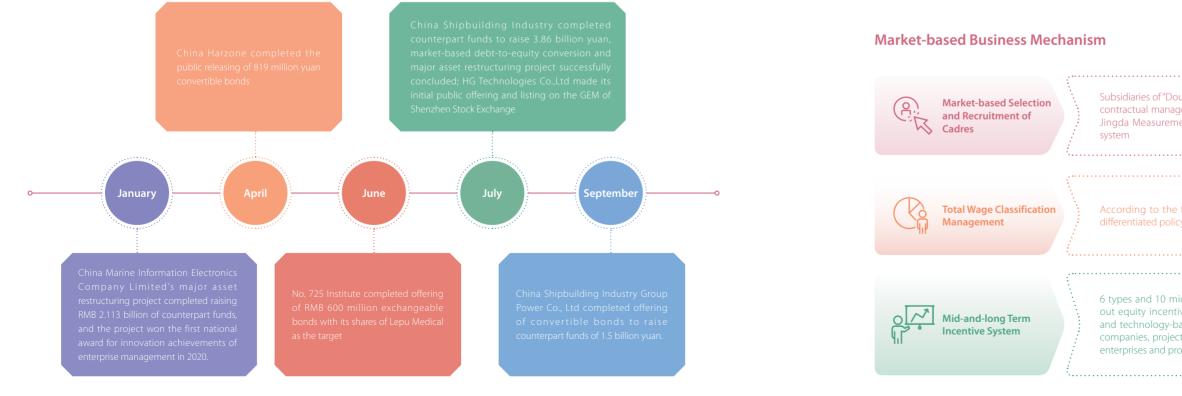
## **Accelerating Mechanism Innovation, Releasing Development Vitality**

CSSC had made positive progress in improving the modern enterprise system, perfecting the legal person governance structure, and promoting the implementation of mixed ownership reform and mid-and-long term incentive mechanism. CSSC consequently effectively stimulated and released the vitality of enterprise development.

CSSC completed the task of reducing 20 enterprises, controlled the legal person level within five levels. 7 "zombie enterprises" achieved clean-up and withdrawal, the surviving 3 enterprises met the governance standards in general. 16 key loss-making sub-enterprises reduced losses by 85% compared to 2019, and 10 enterprises completed the three-year governance goals ahead of schedule.

### **Deepening Capital Operation**

CSSC holds ten listed companies: China Shipbuilding Industry Co., Ltd., China State Shipbuilding Co., Ltd., China Shipbuilding Industry Group Power Co., Ltd., CSSC Offshore & Marine Engineering (Group) Co., Ltd., China Marine Information Electronics Co., Ltd., CSSC Science & Technology Co., Ltd., CSSC (Hong Kong) Shipping Co., Ltd., China Harzone Industry Co., Ltd., Jiuzhiyang Infrared, and HG Technologies Co., Ltd.. We have overcome the severe impact of coronavirus epidemic last year. We have completed a number of market-based debt-to-equity capital operations, the first offering of HG Technologies for example, and achieved capital market financing of more than RMB 10.6 billion. We have continued working on the five priority tasks of cutting overcapacity, reducing excess housing inventory, deleveraging, lowering costs, and strengthening areas of weakness, and carrying out the supply-side structural reform policy. We thus have managed to deliver good outcome in facilitating the high-quality development of defence businesses and shipbuilding and offshore businesses through the operation of state capital.



## **Mixed Ownership Reform**

### Shanxi Fenxi Heavy Industry Co., Ltd.

adopted different mixed ownership reform measures according to business types to achieve main lossmaking business out of trouble, main advantageous business accelerating development, and non-advantageous business auxiliary exiting.

## "Double Hundred" Enterprise Reform

CSSC (Hong Kong) Shipping Company Limited. Jiujiang Jingda Measurement Technology Co., Ltd. Chongging Qianwei Technologies Group Co., Ltd. CSIC (Handan) Perry Special Gas Co., Ltd PERIC. Shanxi Fenxi Heavy Industry Co., Ltd.

Five "doubleundred"enterprises





## Strengthening Management

CSSC continued to improve its management system, optimized its management process, and continuously improved its basic management level in the areas of Board of Directors construction, quality and efficiency improvement, compliant operation and safe production, with the ultimate aim to strengthen the foundation of the Group's high-quality development.



## Standardizing Construction and Operation of the Board

CSSC continuously strengthened the construction of the Board of Directors, standardized the operation of the Board, and constantly improved the corporate governance structure of state-owned enterprises, in which each performs its own duties, assumes its own responsibilities, operates in a coordinated manner, and checks and balances in an effective way. At present, there are eight members on the Board of Directors, including five external directors appointed by SASAC of the State Council. Under the Board of Directors, there are five special committees (i.e. the Military Industry Committee, the Strategy and Investment Committee, the Nomination Committee, Payment and Assessment Committee, and Audit and Risk Control Committee) as well as the secretary and office of the Board of Directors.

In 2020, CSSC held 12 meetings of the Board of Directors with 67 proposals reviewed, 23 special committee meetings with 66 proposals reviewed, and promoted a series of major decisions in strategic restructuring, deepening reform, capital operation, resource integration, etc.



The board of directors conscientiously implemented the latest requirements of the Party Central Committee to accelerate the construction of the modern enterprise system, and gave full play to the role of the Board of Directors in "developing strategies, making decisions and preventing risks". The Board formulated the Outline of High-Quality Development Strategy of CSSC and Administrative Measures for Authorization by the Board of Directors of CSSC, and constructed a "1 + 2 + N" system of the Board of Directors.



The board of directors has placed the in-depth front-line investigation in an important position and formulated the annual research plan. In 2020, the external directors carried out 12 field-investigations in Beijing, Shanghai, Guangdong, Hubei, Hebei, Jiangsu, Yunnan, Heilongjiang, Liaoning, Hainan and other provinces and cities, 36 member units and 5 departments of the headquarters.

## Further cost reduction, quality improvement and efficiency

With cost reduction as an important starting point, CSSC strengthened the target cost management by leading the construction of the cost control and cost management system of member units. Thus, CSSC systematically improved the management and control ability in all aspects, continuously promoted cost reduction, quality improvement and efficiency enhancement, and continuously improved the market competitiveness and overall economic benefits of products.

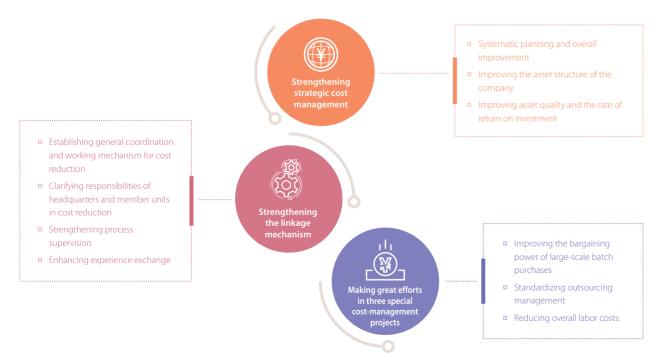


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## **Full Implementation of Cost Reduction**

CSSC took cost reduction as a "life project" critical to survival and development, and comprehensively improved the ability and level of cost management and control with great courage, perseverance and practical innovations.







### Implementing responsibilities to guarantee the effectiveness of cost reduction measures



### Forming a working synergy

Enhancing guiding support from headquarters

Detailing measures of member units

Mutual support and common improvement

### Strengthening incentives for assessment

Refining the assessment system

Implementing reward and punishment requirements

Implementing all targets

## More honors for management and innovation achievements of CSSC

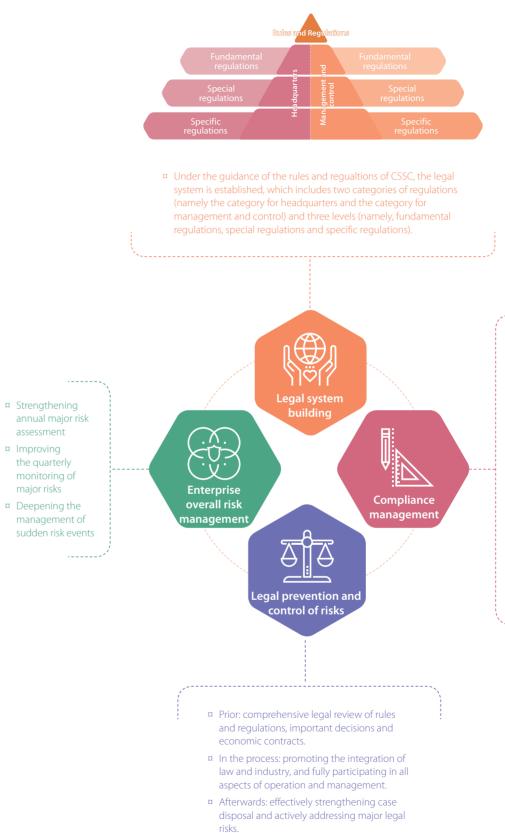


## **Stressing legal system**

Focusing on the goal of the comprehensive construction of perfect governance, operation compliance, management standardization and lawabiding integrity, concentrating on the legal system, legal ability and legal culture, CSSC promoted the legal construction of ships, giving full play to the support and guarantee role of legal work in integration and value creation for quality and efficiency, and thus boosted the standardization of production and operation.



Dispute cases were suppressed and	In 2020
controlled, and the number and the subject amount of major dispute cases were reduced by over <b>30</b> %,	CSSC stipulated and revised <b>124</b> rules and regulations,
and thus losses of <b>2.928</b> billion yuan were avoided and recovered.	including <b>18</b> fundamental regulations, <b>53</b> special and regulations, <b>53</b> specific regulations,



- ¤ Leadership mechanism: establishing a compliance management committee to clarify the leading department and responsibilities of the compliance management department
- ¤ Special institution: (the) release of "Compliance Management Rules".
- ¤ Closed-loop management: leaders take the initiative and all staff participate to eliminate habitual management violations.
- ¤ Compliance risk: organize compliance self-inspection and deal with sudden compliance risk events.

## Strengthening quality and safety management

CSSC took quality and safety as the fundamentals which need solid, in-depth and detailed implementation.

### Organizing quality training and "Quality Month" activities

CSSC organized 4 training courses on zeroing out quality problems, with a total of more than 8,000 participants from all member units. CSSC also launched the "Quality Month" activities under the theme of "Implementing Refined Management and Achieving High-Quality Development" in 2020 to promote quality publicity and education. Thus, CSSC fully implemented the requirements of refined quality management and provided strong impetus for high-quality development.



"Ouality Month" activities at member units

Quality Management Won Numerous Honors

In 2020, CSSC paid close attention to quality management and improvement and won many quality honors. No.702 Institute won the Jiangsu Provincial Governor Quality Award, No.711 Institute won the Gold Quality Award of Shanghai Municipal Government, and No.719 Institute won the Yangtze River Quality Award of Hubei Province. The quality control (QC) group "Treading on the Waves" from Hudong-Zhonghua Shipbuilding (Group) Co., Ltd. won the Platinum Award, the highest prize in Publication Contest of International Convention on Quality Control Circles (ICQCC); 7 QC groups, including "Chameleon" QC group from No.701 Institute, won the National Excellent Quality Control Circles Award; and 10 teams, including the OTS Team of No. 2 Department of Carrying from Jiangnan Shipbuilding (Group) Co., Ltd. won the National Quality Trustworthy Team Award. Praises and awards of quality control greatly contributed to the overall improvement in the level of quality control in CSSC.





### Intensifying safety trainings

CSSC held training for leaders and safety management personnel to publicize and implement the national laws and regulations on work safety and the management system of CSSC. A total of 284 people participated in the trainings and obtained the safety qualification certificate of the State Administration of Science, Technology and Industry for National Defence. Relying on the Work Safety Training Center of China Shipbuilding Industry, safety qualification training was held, with more than 200 special operation training sessions and 11893 participants. Affected by the pandemic, the safety online training platform was launched for the first time, training 1259 people.



In June 2020, with the theme of "eliminating potential accidents and building a strong security line of defence", CSSC further strengthened the implementation of safety responsibilities and organized "Safety Month" activities when the epidemic was under control. Thus CSSC continuously promoted intrinsic safety.





CSSC implemented the decision and deployment of the Party Central Committee and the State Council, made overall plans for safety risk prevention, and strengthened safety control and emergency response in special periods.

Dalian Shipbuilding Industry Co., Ltd. made every effort to ensure life and health safety of employees by improving the emergency system, organizing a full-time rescue team, regularly carrying out emergency practice, and continuously improving safety emergency support.





CSSC implemented the national requirements of precise, scientific and legal pollution control in various tasks against pollution by continuously reducing energy consumption and pollutant emissions.



## Promoting treatment of VOCs

Dalian Shipbuilding Industry Co., Ltd. has completed the installation and tests of VOCs treatment equipment for the pilot project of "zeolite rotor +CO" and entered the trial stage. The data shows that the VOCs removal rate can reach 99.47%.



Tips: VOCs (volatile organic compounds) refer to organic compounds with saturated vapor pressure greater than 133.32pa and the boiling point below 50 ~ 260℃ under the normal temperature, or any volatile organic solid or liquid under the normal temperature and pressure.

## - **S** Strengthening the management of hazardous waste

Shanxi Pingyang Industry Machinery Co., Ltd. carried out standardized management of hazardous waste through standardized on-site management and construction of hazardous waste storage rooms.

### Standardizing site management to dispose hazardous waste in compliance with regulations.

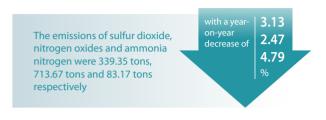
CSSC carried out special treatment of hazardous waste and improved the on-site management level of the generation, storage and transfer of hazardous waste. In 2020, 12 kinds of hazardous wastes including chromium mud, waste engine oil, chromic anhydride barrels, waste oil barrels and waste paint barrels were entrusted to be disposed in 10 batches, with a total disposal capacity of 94 tons.

### Upgrading environmental protection facilities and establishing temporary storage rooms for hazardous waste

In 2020, two garages with an area of about 110 m² were put into use after transformation in strict accordance with the requirements of "Hazardous Waste Storage Standards" for impermeability and corrosion protection. The overall transformation met the requirements of hazardous waste storage management.



## **Green Development**





## **Developing Green Products**

CSSC actively produced "green brand products" by taking the advantages of innovations in science and technology. CSSC increased new energypowered ships to promote green energy-saving applications and reduce consumption of resources and energy as well as the impact on the ecological environment. CSSC will contribute China's power to global green development by providing solutions for the ocean shipping industry to "reach the carbon peak and carbon neutralization".



In January 2020, No. 711 Institute and Shanghai Passenger Shipping Co., Ltd. signed a contract to build the world's first pure supercapacitorpowered ferry, providing a green transportation model for the construction of Chongming's world-class ecological island and the host of the Flower Expo, and providing a complete new demonstration for new energy inland and coastal vessels in China.





The first domestic oil, gas and electric hybrid river vessel "New Yangtze 26007" made its maiden voyage after clean energy transformation.

In June 2020, No.711 Institute customized the overall dynamical system renovation plan for the "New Yangtze 26007" by adopting hybrid multimode switching control, applying energy-saving and emission reduction technologies such as variable speed gas units and DC networking, reducing NOx emissions by more than 90% and sulfur oxide and PM2.5 emissions near zero.





In November 2020, the world's first winged sail-boosted VLCC project designed and built by Dalian Shipbuilding Industry Co., Ltd won the Gold Award for product design, which is of great significance for China's shipbuilding industry to seize the commanding height of international large ship technology. This helped the transformation and upgrading of the shipbuilding industry and promoted the green and energy-saving development of large ships.



In May 2020, CSSC, People's Government of Guangdong Province and China National Offshore Oil Corporation signed the Cooperation Framework Agreement on the LNG Power Transformation Project for Inland Waterways in Guangdong Province in Beijing. In response to the needs of ship pollution control in the Pearl River Basin, CSSC innovated cooperation models to jointly promote Guangdong LNG power transformation of inland river vessels in the province, aiming at a demonstration project for pollution control of inland river vessels and creating a green Pearl River to achieve a win-win situation for ecology and economy.





In January 2020, the first self-owned brand 8M23G natural gas generator developed by No. 711 Institute was successfully connected to the grid for power generation. The unit generates 7 million kWh of clean electricity per year, generating more than 4 million yuan in revenue for customers. The successful connection to the grid marks the official start of the market application of natural gas engines developed by No. 711 Institute.



In July 2020, the first domestic prototype of the catalytic combustion heat supply dehydrogenation device independently developed by CSSC No.712 Institute was successfully launched and the commissioning was completed, marking a major breakthrough in key technologies for the engineering application of organic liquid hydrogen storage.

### The world's first winged sail-boosted VLCC project won the Gold Award at China Excellent Industrial Design Awards.



## **Providing Green Service**

Adhering to the concept of green development, CSSC took initiatives to layout a green service industry which is pollution-free, harmless, non-



Successful Delivery of the First Environmental Emergency Monitoring Vessel in Xiong'an New District

In September 2020, the first environmental emergency monitoring vessel guality, environmental pollution accidents and other emergency events,





### Winning Bid for EPC General Contracting Project for VOCs Treatment



The first domestic three-dimensional monitoring system for marine air pollutants was put into demonstration operation



The first domestic rapid emergency thermal-desorption soil-remediation equipment

In July 2020, the first domestic rapid emergency thermal-desorption soil-remediation equipment was successfully launched. The equipment was



In September 2020, No. 702 Institute participated in the emergency dredging project in Taihu Lake, Wuxi, and sent a general environmental cutter suction dredger and an ecological boat to the lake to remove silt from the lake bottom and nearshore silt respectively.



"Magnetic coagulation +BAF" water treatment equipment helped Wuhan East Lake's high score pass of the national acceptance of the national demonstration river and lake construction

In December 2020, No. 704 Institute won the bid for the Wuhan East Lake sewage treatment project, and used the largest sewage treatment equipment in the institute "magnetic coagulation + BAF" to dredge the silt and tailwater of Miaohu Lake, Lingjiaohu Lake, Yujiahu Lake, and other sub-lakes. For water treatment, the effluent water quality was level A of "Pollutant Discharge Standard for Urban Sewage Treatment Plants" (GB



In December 2020, No. 9 Institute completed designing the key bay renovation southernmost end of the Pearl River Estuary. It is located in open waters with

### Ecological dredging + silt harmless treatment integrated technology helps Taihu Lake emergency dredging project





## **Insisting on Sharing** and Win-win

CSSC actively practised the concept of shared development and thus paid close attention to the demands of customers, employees and other stakeholders. Accordingly, CSSC conducted extensive exchanges and cooperation with partners, enhanced employees' sense of belonging and happiness, and shared development results with all parties.

## Building a Value Chain to Expand the Circle of Friends for a Worldclass Shipbuilding Corporation

CSSC actively establishes a wide range of cooperative relations with governments, financial institutions, research institutes, universities, enterprises and other institutions for mutual learning and mutual complementing, thus created a good atmosphere of cooperation, and achieved mutual benefit and mutual development.

## **Government-Enterprise Cooperation**



## **Bank-Enterprise Cooperation**

CSSC strengthened constant communication and cooperation with banks, funds, securities and other financial institutions, and explored the establishment of strategic partnerships on the basis of mutual benefit.





## **Research-Enterprise Cooperation**

For active industry-university-research cooperation, CSSC increased exchanges and cooperation with institutions of higher learning in terms of scientific research and personnel training, with the aim to break down foreign knowledge barriers and promote the development of the industry.



### **Enterprise-Enterprise Cooperation**

With industrial links, CSSC carries out various forms of exchanges and cooperation with related industries and enterprises through information sharing, business collaboration, and strategic cooperation, etc.



## **Enhancing Employees' Sense of Gains and Benefits of High-guality Development Results**

CSSC achieved growth of sustainable value and growth of employees by creating an inclusive and harmonious working environment for employees, building a platform for employees' career development, cared for the well-being of employees.

## **Employees' Rights and Interests Protection**

Sticking to the people-oriented principle, CSSC was committed to establishing equal and harmonious labor relations with employees by protecting their legal rights and interests and satisfying their reasonable demands, and continuously creating an equal, respectful and safe working environment for employees.

The recruitment of employees was carried out in strict accordance with the requirements of laws and regulations for equal employment. CSSC signed labor contracts with formal employees in accordance with the law with full respects to the rights of each employee. As a result, no major labor disputes occurred.

The total number of employees is **356,000** 

CSSC implements democratic management, and accordingly CSSC improved the employee representative assembly system and labor union system and ensured employees' relevant rights by implementing public knowledge of factory affairs and broadening the channels for employees to participate in management,.

The response rate of the mailboxes The proportion of employees of the Chairman of the Labor participating in the Labor Union at all levels: 100% Union: **100**%

CSSC improved the safety level of occupational places by further improving occupational health protection standards in accordance with the developmental trends of the industry and occupational health protection requirements.

(A)

CSSC strengthened occupational health examinations and implemented policies on work-related injuries, medical insurance, and assistance.





awareness of active protection.

## **Assistance of Employees' Development**

CSSC implemented the strategy of talents for employees' development by improving the talent training mechanism and deepening the reform of system and mechanism of talent development.

## **Staff Training**

In 2020, CSSC organized on-line and off-line training courses for nearly 10,000 trainees, including deputy staff of headquarters departments and member units, headquarters staff, highly skilled talents, Chief Commanders and Chief Designers, cadres of member units, and new employees, with.

training investment **178,813,400** yuan employees participants in training 620,000



In September 2020, CSSC held the 2020 new employee orientation. Chairman Lei Fanpei attended the meeting and delivered a speech in which he emphasized that for the new era, CSSC embarked on a new journey for building a world-class ship corporation, providing a broad stage for everyone to serve the country and realize their ideals in life. He hoped that the new employees would have great ambitions and work down-to-earth from the new starting point. He wished that the new employees would achieve a splendid life by integrating their personal ideals and pursuits into the cause of the Party and the country and into the journey of building a world-class ship group.



In October 2020, 160 doctors and masters graduated from China Ship Research and Development Academy, of which 109 graduates entered CSSC.



First Training Course for Young and Middle-aged cadres



In October 2020, CSSC held the first training course for young and middleaged cadres. Attaching great importance to the training and selection of young cadres and taking training and selection of outstanding young cadres as basic, strategic, and pilot work, the Party Leadership Group of CSSC established a continuous long-term training mechanism.

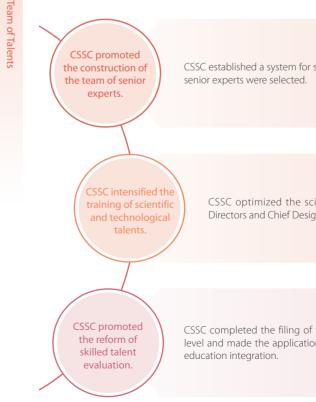
### **Career Development**

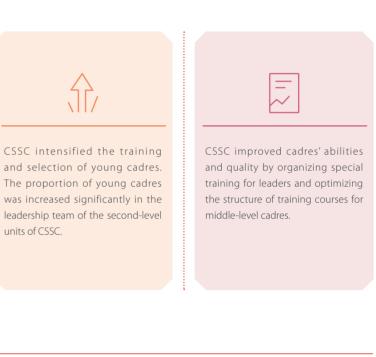
**Cadre Training** 

CSSC smoothed the path for employees' career development by improving the mechanisms of talent selection, evaluation, training and incentives oriented by innovation, quality and contribution.

CSSC adhered to the standards of good cadres for the new era and the requirements of cadres in stateowned enterprises, putting political standards in the first place.

units of CSSC.





CSSC established a system for senior expert posts and initiating the first selections. In total 259

CSSC optimized the scientific and technological teams by selecting strong Chief Directors and Chief Designers to defence ships for key projects.

CSSC completed the filing of the first pilot units for national certification of vocational skill level and made the application for one of the first national pilot enterprises for production-

## Care for employees' work and life

To gather strength for the sustainable development of the corporation, CSSC improved the working conditions of employees, organized various cultural and sports activities, advocated a healthy lifestyle and cared for the physical and mental health of retired employees.



In January 2020, CSSC celebrated its first Chinese New Year Party. Employees in the headquarters and member units in Beijing gathered together to celebrate the Chinese New Year.





Various Sports Activities





basketball games

recreational sports meetings



CSSC distributed to frontline employees tea for heatstroke prevention, Yunnan Baiyao medicine, scald cream, medical ethyl and other medications for heatstroke prevention, emergency and epidemic prevention.







In January 2020, before the Chinese New Year, members of the Party Leadership Group of CSSC paid visits to old comrades in various cities or towns, for greetings and blessings.





In September 2020, to commemorate the 75th anniversary of the victory of the Chinese People's War of Resistance Against Japanese Aggression and the World Anti-Fascist War, many CSSC member units paid visits to revolutionary veterans.





On the International Children's Day on June 1st in 2020, CSSC and its member units organized various celebrations and received various talentdisplay works from employees' children, including paintings, calligraphy, videos, and testimonials, etc. Through the activities, CSSC gave more care to the children of its employees.





I want to be as brave, smart and patriotic as brother Haiwa!

Recalling bitterness and sweetness, listening to my father telling the story of the Little Carrot Head



Employee's Children's Work" Bravely Set Off, Anti-epidemic heroes!"

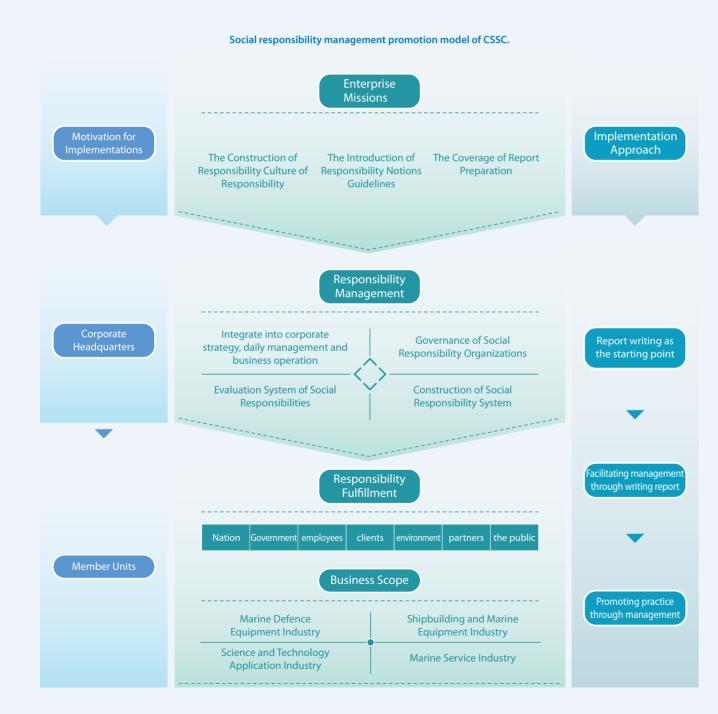


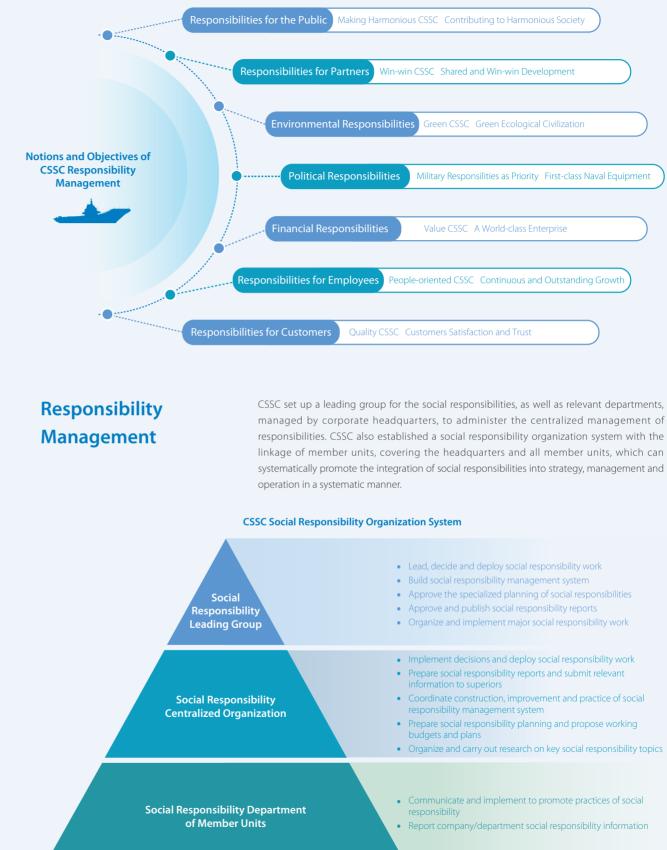
Employee's Children's Work — "Peace Ark" Hospital

## **Responsibility Management**

## **Responsibility Notions**

Adhering to the enterprise mission of "leading the development of the industry, supporting the construction of national defense and serving the national strategy", we gradually walk out of a mission-led road to fulfill responsibility, and consciously integrate social responsibility into corporate strategy and corporate culture, promote the practice of responsibility, carry out responsibility management, and realize the organic unity of undertaking historical mission, fulfilling social responsibility and promoting the sustainable development of enterprises.





## **Responsibility communication**

CSSC will readily communicate with various stakeholders and establish a regular mechanism on social responsibility information disclosure. Through ways of disclosing social responsibility information on CSSC's official website and WeChat platform, compiling and publishing annual social responsibility reports, etc., CSSC will disseminate concepts and practices about social responsibilities, enhance influence of social responsibilities and strengthen operational transparency.

	Country	Government	C O C Employees	Customers	<b>Partners</b>	Counterparts
Our common goals	<ul> <li>Serving national defence with quality and efficiency</li> <li>Leading the industry through technological innovation</li> <li>Preserving and appreciating state-owned assets</li> <li>Creating jobs and achieving harmonious development</li> </ul>	<ul> <li>Abiding by the law and discipline</li> <li>Paying taxes in accordance with the law</li> </ul>	<ul> <li>Basic rights and benefits protection</li> <li>Professional quality improvement</li> <li>Wide career development space</li> <li>Sense of belonging and identity</li> </ul>	<ul> <li>Quality products and services</li> <li>Conscientious performance of contracts</li> <li>Win-win cooperation</li> </ul>	<ul> <li>Adhere to business ethics</li> <li>Open and fair procurement</li> <li>Win-win cooperation</li> <li>Mutual development</li> </ul>	<ul><li>Fair competition</li><li>Industrial development</li></ul>
Our communication channels	<ul> <li>Regular work reports</li> <li>Relevant meetings</li> <li>Information Submission</li> <li>CSSC website, newspapers and magazines, WeChat, etc.</li> </ul>	<ul><li>Work reports</li><li>Relevant meetings</li><li>Correspondence</li></ul>	<ul> <li>Open system of factory affairs</li> <li>Dialogue mechanism</li> <li>Staff representative assembly</li> <li>Satisfaction survey</li> <li>Visits and condolence</li> </ul>	<ul> <li>CSSC official website</li> <li>Contract and agreement</li> <li>Satisfaction survey</li> </ul>	<ul> <li>Contract and agreement</li> <li>Cooperative R&amp;D</li> <li>Joint activities</li> <li>Daily communication</li> </ul>	<ul><li>Industry conferences</li><li>Associations</li><li>Seminars</li></ul>
Our persistent efforts	<ul> <li>Innovative enterprise</li> <li>Economic development transformation</li> <li>Economic contribution</li> <li>Driving local economy</li> </ul>	<ul> <li>Abiding by laws and regulations</li> <li>Active communications with governmental departments at all levels</li> </ul>	<ul> <li>Establishing a perfect payroll system</li> <li>Increasing health and safety protection</li> <li>Building talent projects</li> </ul>	<ul> <li>Quality, efficient and safe products</li> <li>Customized products and services</li> </ul>	<ul> <li>Implementing fair and transparent business principles and processes</li> <li>Making bidding and procurement information public</li> <li>Responsible procurement</li> </ul>	<ul> <li>Leading the industry development</li> <li>Enhancing the value of the industry chain</li> <li>Sharing the latest technological achievements</li> </ul>

Environment	کک Society
<ul> <li>Green development, energy saving and emission reduction</li> <li>Resource saving</li> <li>Clean energy</li> <li>Green office</li> </ul>	<ul> <li>Participating in community development</li> <li>Supporting public welfare</li> <li>Providing job security</li> </ul>
<ul> <li>CSSC official website</li> <li>Information Submission</li> <li>Regular work reports</li> <li>Public information disclosure</li> </ul>	<ul> <li>Cooperation and joint construction</li> <li>Public welfare activities</li> <li>Community involvement</li> <li>Volunteer activities</li> </ul>
<ul> <li>"Resource-saving" enterprises</li> <li>"Environment-friendly" enterprises</li> <li>Green products and services</li> <li>Developing green industry</li> </ul>	<ul> <li>Poverty alleviation in designated regions</li> <li>Caring aids for students</li> <li>Aiding disaster relief</li> <li>Encouraging volunteer action</li> </ul>

## **Future Prospects**

2021 is a year of special importance in the progress of China's modernization. It is the first year that China has implemented the "14th Five-Year Plan" and embarked on a new journey of building a socialist modern country in an all-round way. Guided by Xi Jinping's thoughts on socialism with Chinese characteristics in the new era, CSSC will adhere to the general keynote of seeking progress while maintaining stability. Based on the new development stage, with the new conception for development, CSSC will build a new development pattern to strengthen the main industry, with the focus on primary responsibilities for a strong army. Meanwhile, CSSC will strengthen innovation and integration and implement the three-year action plan to comprehensively deepen the reform, strengthen refined management, and improve the quality of Party construction. CSSC will resolutely accomplish the goals and tasks of the year to ensure a good start of the "14th Five-Year Plan". To sum up, CSSC will comprehensively promote the high-quality development of the corporation.

## Conclusion

## Table of Performance for Key Tasks

indicators	unit	2020
economic		
Sum of assets	100 million yuan	8614
Revenue	100 million yuan	3233
Sum of profits	100 million yuan	167
Net profit	100 million yuan	145
Sum of tax	100 million yuan	96
Technology		
R&D capital investment	100 million yuan	380
National Innovation Platform	unit	63
State Key Laboratory	unit	1
National Engineering Technology Research Center	unit	2
National Engineering Laboratory	unit	6
National Engineering Research Center	unit	4
National Enterprise Technology Center	unit	29
National R&D Center	unit	4
National Defence Science and Technology Key Laboratory	unit	11
National Defence Technology Industry Innovation Center	unit	4
National Innovation Base	unit	2
Patents	item	10281
Invention patents	item	7896
International/national and industrial standards	item	181
Society		
Total number of employees	10,000	35.6
Legal review rate of economic contracts	%	100
Employee training investment	RMB 10,000	17881
Staff training	10,000 person-times	62
Employee medical examination coverage	%	100
Various types of assistance funds invested	RMB 100 million	1.45
Environment		
Comprehensive energy consumption per 10,000 yuan output value	ton of standard coal/ 10,000 yuan	0.04
Sulfur dioxide emissions	ton	339.35
NOx emissions	ton	713.67
Ammonia nitrogen emissions	ton	83.17

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## Feedback

### Dear readers,

### Hello!

Thank you for reading this report. We sincerely look forward to your evaluation of this report and your valuable comments, so that we can continue improving our social responsibility work and improve our ability and level to perform social responsibility work!

Thank you!

China State Shipbuilding Corporation Limited

August 2021

### Optional question: (please select " $\sqrt{}$ " in the corresponding position)

1. Your overall impre	ession of the report is				
🗌 very good	□ good	🗌 fair	🗌 poor	very bad	
2. In your opinion, the quality of the social responsibility information disclosed in the report					
🗌 very high	🗌 high	🗌 average	🗌 low	very low	
3. What do you think of the report structure?					
very reasonable	relatively reasonable	e 🗌 fair	oor poor	very poor	
4. What do you think of the layout design of this report and its form?					
very good	_ good	🗌 fair	□ poor	□ very bad	

### Open questions:

Your valuable comments and suggestions on the "CSSC 2020 Corporate Social Responsibility Report" are welcome.

You can contact the 2020 Corporate Social Responsibility Report Compilation Team of CSSC by sending an email to cssc@cssc.net.cn or telephoning at 86-10-88598000, or faxing the above form to 86-10-88599000. We will take your comments and suggestions seriously and promise to properly protect your above-mentioned information from third parties.

# Build a world-class shipbuilding group



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