



## DIRECTORS' REPORT

### To The Members of Praj Industries Limited,

Your Directors are pleased to present the 34th Annual Report and the Audited Financial Statements for the year ended 31st March, 2020.

### Financial Results

During the year under review, your Company has recorded total income of Rs.9756 Mn (previous year Rs. 9517 Mn), registering increase of 3% in total income. Profit after Tax increased by 3% to Rs.647 Mn (Previous year Rs. 624 Mn.). The performance summary is presented herewith:

	(₹ Mn.)	
Particulars	2019-20	2018-19
Turnover	9419	9233
Other Income	337	284
<b>Total Income</b>	<b>9756</b>	<b>9517</b>
Total Expenses	8981	8708
PBT	776	809
PAT	647	624
Other Comprehensive Income	(12)	5
Total Comprehensive Income	635	629
(+) Balance in Profit & Loss account	4926	4969
(+) INDAS Adjustments (ESOPs)	4	9
(-) IND AS Adjustment (Adjustment to opening Retained Earnings - IND AS 116: Leses / - IND AS 115: Revenue Recognition)	39	154
<b>Profit Available for Appropriations</b>	<b>5526</b>	<b>5453</b>
Appropriations		
- Final Dividend (F.Y. 2018-19/F.Y. 2017-18)	296	386
- Dividend Tax (F.Y. 2018-19/F.Y. 2017-18)	61	79
- Interim Dividend (F.Y. 2019-20)	494	
- Dividend Tax (F.Y. 2019-20)	102	
Transfer to Special Economic zone Re-investment Reserve	159	62
<b>Balance in Statement of Profit &amp; Loss</b>	<b>4414</b>	<b>4926</b>

### State of Company's Affairs

Please refer Management Discussion & Analysis report annexed to this report dealing with the state of Company's affairs at length. (Refer Annexure 1).

### Summary of Consolidated Results

During the year, the Total Income stood at Rs. 11324 Mn against last year (Rs. 11734 Mn). Profit before tax at Rs. 831 Mn against previous year's figure (Rs. 879 Mn). The performance summary is presented herewith:

	(₹ in Mn)	
Particulars	2019-20	2018-19
Turnover	* 11024	11411
Other income	300	323
Total income	11324	11734
Total expenses	10493	10855
PBT	831	879
PAT (after Minority Interest)	704	682
(+) Other Comprehensive Income	(3)	6
Total Comprehensive Income	701	688

\* The turnover for F. Y. 2019-20 was less due to lock down declared by Govt. in second half of March 2020, on account of COVID-19.

## Dividend

The Board of Directors vide Circular Resolution No.CIR/BM/3/2019-20 dated 5th March, 2020, declared and paid an Interim Dividend of Rs.2.70 /-per share (135%) of Face value of Rs.2/- for the financial year 2019-20. The Interim dividend pay-out was Rs. 596.11 Mn (Dividend: Rs. 494.47 Mn and Dividend Distribution Tax Rs. 101.64 Mn).

The above mentioned Interim Dividend shall be treated as final dividend for the year 2019-20.

The dividend payout is in accordance with the Company's Dividend Distribution Policy.

## Dividend Distribution Policy

In accordance with the Regulation 43A of SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, the Company has formulated a Dividend Distribution Policy and the same is annexed herewith as **Annexure 11**. The Policy is also hosted on the website of the Company and can be viewed at [www.praj.net](http://www.praj.net)

## Investor Education and Protection Fund (IEPF)

Pursuant to the Investor Education and Protection Fund (Accounting, Audit, Transfer and Refund) Rules, 2016, the Company has transferred unclaimed/ unpaid dividend of Rs. 1,361,275/- to Investor Education and Protection Fund pertaining to the financial year 2011-12 on 24/09/2019. Further, the Company has also transferred 25979 shares to IEPF on 11/10/2019.

### Details of Nodal Officer:

Mr. Dattatraya Nimbolkar, Chief Internal Auditor and Company Secretary has been appointed as Nodal Officer of the Company. Details in this regard are available on the website of the Company at [www.praj.net](http://www.praj.net)

## Reserves

The Company is not proposing any transfer to the General Reserve for the year 2019-20.

## Credit Rating

- a) CRISIL has re-affirmed "A1+" rating to the Company's short-term banking facilities which signifies that the degree of safety regarding timely payment of instruments is very strong.
- b) CRISIL has also re-affirmed its rating of the Company's long-term bank facilities to "AA/stable".  
The "AA" rating signifies high safety with regard to timely payment of long-term financial obligations.

## Subsidiaries

Praj Engineering & Infra Ltd. India, Praj HiPurity Systems Ltd., India, Praj Americas Inc., U.S.A., Praj Far East Co. Ltd., Thailand, Praj Industries (Africa) (Pty.) Ltd, South Africa, Praj Far East Philippines Ltd. Inc., The Philippines, continue to be subsidiaries of your Company.

During the year, Praj Industries (Namibia) (Pty) Ltd. was closed down on 11/09/2019 as the project for which it was formed, was fully executed.

Consolidated Financial Statements of the Company, which include the results of the said Subsidiary Companies, are included in this Annual Report. Further, a statement containing the particulars for each of the Company's subsidiaries is also enclosed. Copies of Annual Accounts and related detailed information of all the subsidiaries can also be sought by any member of the Company or its Subsidiaries by making a written request to the Company Secretary at the Registered Office of the Company in this regard. The Annual Accounts of the Subsidiary Companies are also available for inspection at the Company's and/or the concerned Subsidiary's Registered Office.

The Company has formulated a policy for determining 'material' subsidiaries and such policy is hosted on the Company's website i.e. [www.praj.net](http://www.praj.net)

Further, a statement containing salient features of the financial statements of subsidiaries in the prescribed format AOC-1 is appended as **Annexure 7** to this Report. The statement also provides the details of performance, financial position of each of the subsidiaries.

## Corporate Governance

Pursuant to the provisions of Regulation 34 (2) &(3) and 53(f), read with Schedule V of SEBI(Listing Obligations & Disclosure Requirements) Regulations, 2015, Management Discussion and Analysis Report (**Annexure 1**), Report on Corporate Governance and Compliance Certificate on Corporate Governance (**Annexure 3**), Business Responsibility Report (**Annexure 10**), Dividend Distribution Policy (**Annexure 11**) are annexed to this report.

## Directors

Ms. Parimal Chaudhari (DIN 00724911) retired at 33<sup>rd</sup> Annual General Meeting held on 23<sup>rd</sup> July, 2019 and was re-appointed as Director of the Company.



Members at 33<sup>rd</sup> Annual General Meeting held on 23<sup>rd</sup> July, 2019 have approved the extension of tenure of Dr. Pramod Chaudhari, Executive Chairman (DIN:00196415) and Mr. Sachin Raole, Chief Financial Officer and Director-Finance & Commercial (DIN:00431438) for a period of three (3) years respectively.

Members at 33<sup>rd</sup> Annual General Meeting held on 23<sup>rd</sup> July, 2019 had approved re-appointment of Mr. Berjis Desai (DIN:00153675) and Mr. Sivaramkrishnan Iyer (DIN:00503487) as Independent Directors for a period of Five (5) years till 31<sup>st</sup> March, 2024.

Mr. Daljit Mirchandani (DIN:00022951) and Mr. Rajiv Maliwal (DIN: 00869035) retired at 33<sup>rd</sup> Annual General Meeting held on 23<sup>rd</sup> July, 2019.

Ms. Parimal Chaudhari (DIN 00724911) will retire at 34<sup>th</sup> Annual General Meeting and being eligible, has offered herself for re-appointment as Director of the Company.

Shareholders at 32<sup>nd</sup> Annual General Meeting held on 6<sup>th</sup> August, 2018, had approved the appointment of Ms. Mrunalini Joshi (DIN:00957617) as Independent Director with effect from 11<sup>th</sup> August, 2017 till the conclusion of Annual General Meeting to be held for adoption of accounts for the financial year 2019-20 or 10<sup>th</sup> August, 2020 whichever occurs earlier.

As per provisions of Section 149 (10) of the Companies Act, 2013 read with relevant Rules and Schedule IV, Independent Director can be re-appointed for consecutive term of five (5) years, subject to approval of shareholders by way of Special Resolution.

Based on the recommendation of Nomination and Remuneration Committee, the Board has re-appointed Ms. Mrunalini Joshi (DIN:00957617) as Independent Director for a period of 3 years with effect from 11<sup>th</sup> August, 2020, subject to approval of shareholders by way of Special Resolution.

Ms. Mrunalini Joshi has given her consent for re-appointment as Independent Director.

Item No. 6 of Notice of 34<sup>th</sup> Annual General Meeting contains necessary details of Special Resolution.

The Board of Directors vide Circular Resolution No.Cir/BM/01/2019-20 dated 08/08/2019 has appointed Mr. Suhas Baxi (DIN:00649689) as Additional Director with effect from 8<sup>th</sup> August, 2019, who will hold office till the conclusion of 34<sup>th</sup> Annual General Meeting.

Further, Board vide above mentioned Circular Resolution has appointed Mr. Suhas Baxi as an Independent Director with effect from 8<sup>th</sup> August, 2019 for a period of Five (5) years, subject to approval of shareholders at 34<sup>th</sup> Annual General Meeting.

Item Nos.7 & 8 of Notice of 34<sup>th</sup> Annual General Meeting contain Resolution for the same.

## Composition of Key Managerial Personnel (KMP)

The Company has the following KMPs;

Name of the KMP	Designation	Date of Appointment	Date of Resignation
Dr. Pramod Chaudhari	Executive Chairman	08.11.1985	N.A.
Mr. Shishir Joshipura	Chief Executive Officer and Managing Director	02.04.2018	N.A.
Mr. Sachin Raole	CFO and Director- Finance & Commercial	14.07.2016	N.A.
Mr. Dattatraya Nimbolkar	Chief Internal Auditor & Company Secretary	22.07.2011	N.A.

## Composition of Audit, Nomination & Remuneration Committee

For details, kindly refer the Corporate Governance Report annexed to this Report (**Annexure 3**).

## Declaration from Independent Directors

The Independent Directors have submitted their annual declaration to the Board confirming that they fulfill all the requirements as stipulated in Section 149(6) of the Companies Act, 2013 read with rules framed there under.

## Auditors

### a) Statutory Auditors

Members at 29<sup>th</sup> Annual General Meeting held on 6<sup>th</sup> August,2015, had appointed M/s P.G Bhagwat, Chartered Accountants, Pune (Firm Regn. No. 101118W) as the Statutory Auditors of the Company till the conclusion of 34<sup>th</sup> Annual General Meeting to be held in the calendar year 2020. Pursuant to the provisions of Section 139 of the Companies Act, 2013 read with Companies (Audit and Auditors) Rules, 2014, Audit Committee has recommended re-appointment of M/s P.G. Bhagwat as Statutory Auditors for another term of 5 years i.e. till the conclusion of 39<sup>th</sup> Annual General Meeting of the Company to be held in the calendar year 2025.

### b) Internal Auditors

The Internal Auditors, Khare Deshmukh & Co., Chartered Accountants, Pune have conducted internal audits periodically and submitted their reports to the Audit Committee.

Their reports have been reviewed by the Statutory Auditors and the Audit Committee.

The Board has appointed Khare Deshmukh & Co., Chartered Accountants Pune, as Internal Auditors of the Company for the financial year 2020-21.

**c) Cost Auditors**

Your Company has appointed Dhananjay V. Joshi & Associates, Cost Accountants as Cost Auditors of the Company for the financial year 2020-21 at the remuneration as set out in item No.4 of the explanatory statement which is subject to the ratification of members in the ensuing Annual General Meeting.

**d) Secretarial Auditors**

M/s KANJ & Co., LLP, Practising Company Secretaries Pune, were appointed to conduct the Secretarial Audit of the Company for the financial year 2019-20, as required under Section 204 of the Companies Act, 2013 read with rules framed thereunder. The Secretarial Audit Report (MR-3) for financial year 2019-20 forms part of the Directors' Report as **Annexure 6**.

The Board has appointed M/s KANJ & Co., LLP, Practising Company Secretaries Pune, as Secretarial Auditors of the Company for the financial year 2020-21.

**Material changes and commitments, if any, affecting the financial position of the Company occurred between the end of the financial year to which these financial statements relate and the date of the report**

Due to COVID-19 pandemic, the operations of the Company are affected from mid March 2020.

The Company has made detailed assessments of the recoverability and carrying value of its assets comprising property, plant and equipment, inventories, receivables and other current assets and on the basis of evaluation, the Company is of the opinion that there are no material changes and commitments affecting the financial position of the Company between the end of the financial year and the date of this report.

Given the criticalities and uncertainties associated with nature, condition and duration of COVID- 19, the impact assessment on the Company's financial health will be continuously made and provided for as required.

The nationwide lockdown announced by Central Government from 23rd March 2020 led to temporary stoppage of operations. With restrictions on resumption of operations, the Company made concerted efforts to obtain necessary approvals from Central and State Government and resumed the operations duly adhering to the Guidelines issued by Central/State/Local Government Authorities for Industrial Units/offices etc.

The Company also took considerable efforts to safely mobilize manpower and implemented the concept of Work From Home for ensuring better customer response. In backdrop of this situation, the Company is making all out efforts to execute the orders thus ensuring support to domestic and international customers.

During this period, your Company commissioned 11 plants. As on date, all the sites of the projects are operational.

Further there was no change in the nature of business of the Company.

**Statement concerning development and implementation of Risk Management Policy of the Company**

In accordance with the provisions of SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, the Board adopted Risk Management Policy and initiated necessary steps for framing, implementing and monitoring the risk management plan for the Company.

The main objective of this policy is to ensure sustainable business growth and to promote a pro-active approach in identifying, reporting, evaluating and mitigating risks associated with the business.

The policy establishes a structured and disciplined approach to Risk Management, in order to guide decisions on risk related issues.

In today's challenging and competitive environment, strategies for mitigating inherent risks associated with business and for accomplishing the growth plans of the Company are imperative. The common risks inter alia are risks emanating from; Regulations, Competition, Business, Technology obsolescence, Investments, Retention of talent, Finance, Politics and Fidelity.

As a matter of policy, these risks are assessed and steps as appropriate are taken to mitigate the same.

The Risk Management Policy is also hosted on the Company's website i.e. [www.praj.net](http://www.praj.net)

The Company has instituted adequate Internal Controls and processes to have a cohesive view of risks, optimal risk mitigation responses and efficient management of internal control and assurance activities.

In the opinion of the Board, there are no risks which may threaten the existence of the Company.



## Internal Financial Controls

The Company has in place, adequate internal financial controls with reference to financial statements. During the year, such controls were tested and no reportable material weaknesses in the design or operation were observed.

## Remuneration Policy for Directors and KMP

The Company's remuneration policy for Directors/ KMP is directed towards rewarding performance based on review of achievements periodically. The remuneration policy is in consonance with the existing industry practice.

The said policy is available on Company's website i.e. [www.praj.net](http://www.praj.net) and is also attached as **Annexure 8** to this report.

## ESOP

During the year, your Company allotted 512,210 shares on exercise of options under the Employee Stock Option Plan 2011. Consequent to the above, the Issued, Subscribed and Paid up Share Capital of your Company increased from 182,647,850 (Rs. 365.296 Mn.) to 183,160,060 (Rs.366.321 Mn.) as of 31<sup>st</sup> March, 2020.

Please refer **Annexure 4** to this report for the particulars required to be disclosed pursuant to Rule 12 (2) of the Companies (Share Capital and Debentures) Rules, 2014 and Clause 14 of SEBI (Share Based Employee Benefits) Regulations, 2014.

## Vigil Mechanism / Whistle Blower Policy

In order to ensure that the activities of the Company and its employees are conducted in a fair and transparent manner by adoption of highest standards of professionalism, honesty, integrity and ethical behaviour, the Company has adopted a Vigil Mechanism/Whistle Blower Policy. This policy is explained in Corporate Governance Report and is also hosted on the website of Company at [www.praj.net](http://www.praj.net).

## Details of policy developed and implemented by the Company on its Corporate Social Responsibility initiatives

Kindly refer **Annexure 2** to this Report.

## Particulars of loans, guarantees or investments made under section 186 of the Companies Act, 2013

Loans, Guarantees and Investments covered under Section 186 of the Companies Act, 2013 form part of the notes to the financial statements provided in this Annual Report. (Please refer Note No.5 to the Standalone Financial Statements).

## Contracts and arrangements with Related Parties

All contracts / arrangements / transactions entered by the Company during the financial year with related parties were in the ordinary course of business and on an arm's length basis. Such transactions form part of the notes to the financial statements provided in this Annual Report. (Please refer Note No. 31 to the Standalone Financial Statements).

During the year, the Company had not entered into any contract / arrangement / transaction with related parties which could be considered material in accordance with the policy of the Company on materiality of related party transactions which is available on the Company's website at the link: [www.praj.net](http://www.praj.net)

## The information in respect of Related Party transactions is given below;

### FORM AOC-2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Act and Rule 8(2) of the Companies (Accounts) Rules, 2014)

## Form for disclosure of particulars of contracts/arrangements entered into by the Company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arms length transactions under third proviso thereto

1. Details of contracts or arrangements or transactions not at arm's length basis ;  
N.A. as there were no transactions during the year which were not at arm's length.
2. Details of material contracts or arrangement or transactions at arm's length basis;  
During the financial year 2019-20, all the transactions entered into with related parties were at arm's length. However, these transactions were not material.

## Performance Evaluation

Regulation 4 (2) (f) (ii) (9) of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 mandates that the Board shall monitor and review the Board evaluation framework. Also, the Companies Act, 2013 states that a formal annual evaluation needs to be made by the Board of its own performance and that of its Committees and individual Directors. In addition, Schedule IV to the Companies Act, 2013 states that the performance evaluation of Independent Directors shall be done by the entire Board

of Directors, excluding the Director being evaluated. The Board works with the Nomination & Remuneration Committee to lay down the evaluation criteria for the performance of Executive / Non-Executive / Independent Directors.

The Board at its meeting held on 4<sup>th</sup> February, 2020 has carried out performance evaluation of all Directors.

Independent Directors have three key roles -Governance, Control and Guidance. Some of the performance indicators based on which the Independent Directors are evaluated include:

- a) Ability to contribute to and monitor the Company's corporate governance practices.
- b) Ability to contribute by introducing international best practices to address top-management issues.
- c) Active participation in long-term strategic planning.
- d) Commitment to the fulfillment of a Directors' obligations and fiduciary responsibilities; these include participation in the Board and the Committee Meetings.

In pursuance of above, the Company has devised a policy for performance evaluation of Independent Directors, Board, Committees and other individual Directors.

The evaluation of all the Directors, Committees and the Board as a whole was conducted based on the criteria and framework adopted by the Board. The Board approved the evaluation results as collated by the Nomination & Remuneration Committee.

#### **Explanation or comments on qualifications, reservations or adverse remarks or disclaimers made by the Statutory Auditors and the Secretarial Auditors in their reports**

There were no qualifications, reservations or adverse remarks or disclaimers made by the Statutory Auditors in their report.

#### **Extract of Annual Return**

The extract of Annual Return pursuant to the provisions of Section 92 read with Rule 12 of the Companies (Management and Administration) Rules, 2014 in prescribed Form MGT-9 for the year ended 31<sup>st</sup> March, 2020 is as per **Annexure 5** to this report.

#### **Number of Board Meetings conducted during the year under review**

The Board met four times during the financial year, the details of which are given in the Corporate Governance Report that forms part of this Annual Report. The intervening gap between any two meetings was within the period prescribed by the Companies Act, 2013 and the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015.

#### **Directors' Responsibility Statement**

In accordance with the provisions of Section 134(5) of the Companies Act, 2013 the Board hereby submits its responsibility Statement:-

- (a) in the preparation of the annual accounts, the applicable accounting standards have been followed along with proper explanation relating to material departures;
- (b) the Directors have selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company at the end of the financial year and of the profit of the Company for that period;
- (c) the Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- (d) the Directors have prepared the annual accounts on a going concern basis;
- (e) the Directors have laid down internal financial controls to be followed by the Company and that such internal financial controls are adequate and were operating effectively; and
- (f) the Directors have devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems were adequate and operating effectively.

#### **Details in respect of frauds reported by auditors under sub-section (12) of Section 143 of the Companies Act, 2013 other than those which are reportable to the Central Government.**

During the year, there was no such incidence of fraud reported by Statutory Auditors to the Management.

#### **Deposits**

The Company has neither accepted nor renewed any deposits during the year under review and also did not have any outstanding deposits at the end of the year.

**Remuneration ratio of the Directors / Key Managerial Personnel (KMP) / Employees**

The information required pursuant to Section 197 read with Rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, in respect of employees of the Company and Directors is furnished hereunder:

Sr. No.	Name	Designation	Remuneration paid FY 2019-20 Rs. Mn.	% increase/ (Decrease) in remuneration over FY 2018-19	Ratio of the remuneration of each Director to median remuneration of employees.
1	Dr. Pramod Chaudhari	Executive Chairman	47.567	(8%)	48.4
2	Mr. Shishir Joshipura	CEO & MD	30.578	2%	31.1
3	Mr. Berjis Desai	Non- Executive Independent Director	2.100	-	2.1
4	Ms. Parimal Chaudhari	Non- Executive Director	1.550	(6%)	1.6
5	Mr. Sivaramakrishnan Iyer	Non- Executive Independent Director	1.750	-	1.8
6	Mr. Sachin Raole	CFO and Director- Finance & Commercial	16.496	(1%)	16.8
7	Ms. Mrunalini Joshi	Non- Executive Independent Director	0.600	9%	0.6
8	Dr. Shridhar Shukla	Non- Executive Independent Director	0.600	9%	0.6
9	Mr. Suhas Baxi	Non- Executive Independent Director	0.600	-	0.6
10	Mr. Dattatraya Nimbolkar	Chief Internal Auditor & Company Secretary	6.258	(13%)	6.4

The median remuneration of employees of the Company during the financial year was Rs.0.982 Mn. In the financial year, there was an increase of around 2% in the median remuneration of employees.

There were 935 permanent employees on the rolls of Company as on 31<sup>st</sup> March, 2020.

Average percentage increase made in the salaries of employees other than the managerial personnel in the last financial year i.e. 2019-20 was around 8% whereas the managerial remuneration for the same financial year reduced by around 4%.

The key parameters for the variable component of remuneration paid to the Directors are considered by the Board of Directors based on the recommendations of Nomination and Remuneration Committee as per the Remuneration Policy for Directors, Key Managerial Personnel and other Employees.

It is hereby affirmed that the remuneration paid is as per the Remuneration Policy for Directors, Key Managerial Personnel and other Employees.

**Particulars of employees**

The information required pursuant to Section 197 read with rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 in respect of employees of the Company is given in **Annexure 9** to this Report.

**Details of significant and material orders passed by the Regulators or Courts or Tribunals impacting the going concern status and Company's operations in future**

No such events occurred during the financial year 2019-20.

**Prevention of Sexual Harassment Policy**

The Company has in place Prevention of Sexual Harassment Policy in line with the requirements of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition & Redressal) Act, 2013. All employees (permanent, contractual, temporary, trainees) are covered under this policy.

The Company has constituted Internal Complaint Committee as per the aforesaid Act.

Your Directors state that during the year under review, there was no case filed pursuant to the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013.

## **Energy Conservation, Technology Absorption, Adaptation, Innovation :**

Sustainability is becoming a watch word in bio-fuels and bio-materials producing industry. To be able to sell these products in international markets, our customers need to have their operations assessed and certified by organization such as RSB [Roundtable on Sustainable Bio-materials].

Five of the ten principles used for such assessment fall perfectly within our sphere of influence. These are given below:

- Lower lifecycle GHG emissions as compared to equivalent non-renewable raw materials.
- Reversing soil degradation, maintaining soil health and enhancing the quality and quantity of surface and ground water resources.
- Minimizing air pollution all along the supply chain.
- Using technologies that minimize unsustainable resource use and improves yield.
- Compliance to all applicable safety, health and environmental regulations.

Praj Technology and Engineering Group has their focus on the designing and engineering of plants and machinery and processes that minimize off-spec products, consumption of energy and water, all types of emissions and use of non-recyclable material. The plants are designed to exceed regulatory norms of environment, health and safety and thereby reduce customers' compliance risks.

Our Business Sustainability Systems monitor the critical norms demonstrating that every new technology advancement beats the previous benchmarks of yield, consumption of water, energy and effluents.

Number of technologies is developed and commercialized successfully, SHIFT – High brix fermentation technology for reduction in effluent quantity thereby reducing energy, Ecosmart Distillation for production of fuel grade, pharma grade and perfumery grade alcohol, Evaporative Distillation, Ecofine /Ecovap MVR 1.5 G ethanol technology based on starch and corn residue, to name a few of them.

Customers find the improvements in the sustainability parameters remarkable and that has helped us in maintaining our technology leadership position. Some of the technologies newly developed and being developed / commercialised are given below:

- HBCS - Technology for concentration of spent wash upto 70 brix PIB : process integrated boiler with use of HBCS for reduction in supplementary fuel.
- Bio-syrup technology giving the customer increase in ethanol yield as well as flexibility to store sugar rich stream to extended number of days of operation.
- Optimized design of ACHE being offered for water stressed projects.
- Optimization of Biogas Up gradation Technology developed with IIS Bangalore and IIT Delhi
- Advance bio-process for production of methane from agri-residue and other solid wastes.
- Technology for Gasification of biomass for production of syn gas and cleaning of syngas is under exploration stage.
- Lignocellulose Ethanol technology developed in house is now under execution and optimization of steam, water, chemical and enzyme consumption with improved GHG savings.
- Bolt on bagasse to ethanol plants under development and commercialization.
- Infusing Sustainability principles into design and engineering of plants and machinery and providing sustainability solutions to the customers is of prime significance.

### **Key Highlights for Financial Year 2019-20 :**

1. During the year, your Company was granted 6 Indian patents and 41 foreign patents. The Company filed 131 international patents during last year. In all, your Company has 74 patents granted to its name.
2. Praj bagged the Industrial Green Chemistry World (IGCW) Award for the environment friendly furfural technology.
3. The enzymatic bio-diesel technology was expanded to use low grade feedstocks like tallow and waste fatty acids. Praj bagged first order for 50 TPD biodiesel plant from tallow in UP.
4. Praj developed lignosulphonate technology from the lignin generated from the 2G enfinity plant. This can be bolted on the 2G plant to improve overall viability of 2G ethanol plants.
5. Praj completed the DBT Biodiversity screening project in collaboration with D Y Patil University within time lines. 20,000 microbes were screened for 4 target molecules in 2 years.





### Foreign Exchange Earnings & Outgo

(₹ Mn.)

Particulars	31/3/2020	31/3/2019
Earnings	3687	2742
Outgo	804	977
Net Foreign Exchange Earnings	2883	1765

Your Company has retained its status as a net forex earner consecutively for past 23 years.

### Acknowledgements

Your Directors wish to place on record their appreciation towards all associates including Customers, Collaborators, Government Agencies, Bankers, Suppliers, Shareholders, Auditors, Employees and others who have reposed their confidence in the Company.

For and on behalf of the Board of Directors

Place: Pune  
Date: 13/08/2020

**Dr. Pramod Chaudhari**  
Executive Chairman