Environmental regulatory framework

1. What are the key pieces of environmental legislation and the key regulatory authorities?

Legislation

In terms of recent developments, it is relevant to note that the environmental regulatory authorities (that is, the Central Pollution Control Board (CPCB) and the State Pollution Control Boards (SPCBs)) have been ordered by the National Green Tribunal (NGT) to strictly enforce and take into account the (previously dormant) Comprehensive Environmental Pollution Index (CEPI). CEPI allocates weightages to various pollutants, ambient pollutant concentrations, receptors (the number of people affected) and additional high-risk elements. The original CEPI assessment was undertaken in 2009, but the CEPI criteria were updated in 2016 and the final report on CEPI was issued in 2018. The NGT in 2019 then directly supervised the enforcement of the CEPI criteria by the regulatory authorities. Industrial clusters are categorised under the CEPI as Polluted Industrial Areas (PIAs), which are each ranked as one of the following:

- A critically polluted area (CPA).
- A severely polluted area (SPA).
- Other polluted areas (OPAs).

The CPCB and SPCBs will now be focused on remediating these CEPI areas and seeking compensation from polluting industries; and any expansion or development of new sites in these areas will be rejected.

The main environmental laws, including under which various key environmental permits (or consents) are being issued in India, include the:

- Water (Prevention and Control of Pollution) Act 1974 (Water Act), which also initially identified the powers, functions and hierarchy of the environmental agencies, the CPCB and the SPCBs.
- Air (Prevention and Control of Pollution) Act 1981 (Air Act).
- Environment (Protection) Act 1986 (EP Act). This umbrella law enables the central government to take measures it deems necessary to protect and improve the environment, and to prevent, control and abate environmental pollution. A wide range of rules and notifications have been adopted under it, such as the:
    - E-Waste (Management) Rules 2016, as amended in 2018 (E-Waste Rules);
    - Bio-Medical Waste Management Rules 2016;
    - Plastic Waste Management Rules 2016;
    - Solid Waste Management Rules, 2016;

    - Construction and Demolition Waste Management Rules 2016;
    - Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016, as amended in 2019 (HW Rules);
    - Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (MSIHC Rules);
    - Coastal Regulation Zone Notification 2019; and
    - Environment Impact Assessment Notification 2006.
- Wild Life (Protection) Act 1972.
- Forest (Conservation) Act 1980.
- Public Liability Insurance Act 1991.
- Biological Diversity Act 2002.
- National Green Tribunal Act 2010.

Regulatory authorities

The key regulatory authorities are the:

- Ministry of Environment, Forests and Climate Change (MoEFCC).
- CPCB
- SPCBs
- District Level Authorities (that is, municipal corporations)

Regulatory enforcement

2. To what extent do regulators enforce environmental requirements?

There has been an upward trend in terms of regulatory enforcement, which can be explained by various factors. For instance, various states have started to insist on the installation of continuous online emissions/effluent monitoring systems, which gives the State Pollution Control Boards (SPCBs) the necessary and objective information to monitor the compliance of companies in their jurisdiction. Moreover, the state high courts, the Central Supreme Court, and the various benches throughout India of the National Green Tribunal (NGT) closely monitor the implementation and enforcement of environmental laws.
As discussed in *Question 1*, with regard to CEPI industrial clusters, the NGT not only actively supervises whether, and how, the CPCB and SPCBs enforce environmental laws, but quite importantly for companies which are new to India, the NGT also has the power to address environmental issues directly with the relevant polluting company, even merely on the basis of media reports of such activity.

Environmental NGOs

3. To what extent are environmental non-governmental organisations (NGOs) and other pressure groups active?

NGOs, think-tanks, and local citizen groups are very active stakeholders in India and readily use the media, the courts and the NGTs to raise their environmental grievances. This is often effective, since the judiciary is generally sympathetic to environmental concerns raised in the public interest. Moreover, the Indian media is also very active and focuses on environmental issues. Interestingly, judges from the NGT, High Court and the Supreme Court even take up environmental cases *suo moto* (that is, on its own motion) based on media coverage of these matters.

Some environmental laws explicitly refer to the rights of citizens in this regard. For instance, the Maharashtra Non-biodegradable Garbage (Control) Act, 2006 empowers a citizen to register the offence against any violators of this Act.

Environmental permits

4. Is there a permitting regime for polluting emissions to land, air and water? Can companies apply for a single environmental permit for all activities on a site or do they have to apply for separate permits?

Integrated/separate permitting regime

An integrated permit system is in place to a large extent. **For instance, a Consent to Establish (CTE) and subsequent Consent to Operate (CTO) and their renewals under the Water Act and Air Act can typically be obtained by submitting a combined consent application to the relevant SPCB.**

The E-Waste (Management) Rules 2016 (*see Question 19*) introduce the Extended Producer Responsibility – Authorisation for Producers, which only requires one centralised and India-wide application with the CPCB instead of with each SPCB.

Also, to streamline the environmental permit/consent system, and avoid repetitive and/or conflicting conditions, the CPCB has waived the requirement of having separate CTEs for industrial units which require an Environmental Clearance (EC) (*see Question 17*). In such cases, the EC will be considered equivalent to a CTE and no separate CTE will need to be obtained.

Single/separate permits

Depending on the type of activities undertaken by a company, multiple permits may need to be obtained.

The Ministry of Environment, Forests and Climate Change (MoEFCC) adopted a new method (from 2016) of classifying the industries it regulates and introduced a new category of "white industries". These white industries are non-polluting industries that no longer need a CTO or an EC under the Environmental Impact Assessment (EIA) Notification. Instead, they merely need to notify the relevant SPCB.
Whereas the earlier industry categories (red, orange and green) were essentially determined based on the size of industries, this new method is based on a Pollution Index (PI) for emissions (air pollutants), effluents (water pollutants) and hazardous waste generated apart from the consumption of resources. A PI score is allocated to each industrial sector as follows:

- Red category: PI score of 60 and above. Table 1 annexed to the notification covers 60 sectors (for example: asbestos, nuclear power plants, shipbreaking, oil and gas extraction, and so on).
- Orange category: PI score of 41 to 59. Table 2 lists 83 types of industries (for example: food and food processing, printing ink manufacturing, paint blending and mixing, and pharmaceutical formulations).
- Green category: PI score of 21 to 40. Table 3 identifies 63 sectors (for example: saw mills, tyres/rube retreating, polythene and plastic products).
- White category: PI score up to 20. Table 4 lists 36 types of industries (for example: solar power generation through solar photovoltaic cells, wind power, and mini hydro-electric power less than 25 megawatts).

5. What is the framework for the environmental permitting regime?

Permits and regulator

The key environmental permits, or consents/authorisations as they are referred to in India, must be obtained from the local State Pollution Control Board (SPCB).
Only in certain cases is a consent/permit or environmental clearance (EC) needed at central level, from one or more of the following:

- The CPCB (for example authorisation as a producer under the E-Waste Rules 2016).
- The Ministry of Environment, Forest and Climate Change (for example, EC under EIA Notification, 2006, import/export of hazardous waste under the Hazardous and Other Waste Rules 2016 and so on).
- Central Ground Water Board (for groundwater extraction related permits)
- Petroleum & Explosives Safety Organization (PESO) (permits relating to storage of diesel at sites for generators).

Length of permit

The SPCBs have some discretion in determining the duration of consents, but there are efforts to streamline these periods for the various industry categories in each state. Typically:

- An initial CTE is valid for one year (for example, during the construction of a site, but depending on the scale of the project this could be longer).
- CTOs under the Water and Air Act vary between three to five years.

Industries are categorised in red, orange, green or white categories, depending on the pollution index score (*see Question 1*):

- White category industries (practically non-polluting industries) do not need to obtain a CTO.
- Green category industries can generally submit a simplified CTO application. Their initial CTO in many states are valid for 15 years.
- Initial CTOs for orange categories are typically ten years, and for red categories one or five years.

Renewal applications are typically granted across industries before 60 to 120 days of expiry of the consent to operate, assuming there have been no severe non-compliance issues. If there is a non-compliance issue, SPCBs can revoke the consent to operate and reissue it only after the non-compliance has been rectified. In such situations, companies often only obtain a one-year CTO, to ensure close monitoring by the SPCBs and ongoing compliance.

Some states have also adopted an auto-renewal of consents for all categories based on self-certification if certain criteria are met, such as:

- When there is no increase in the overall production capacity and pollution load.
- If there is only a marginal increase (up to 10%) in capital investment.

Some key waste-management laws, such as the E-Waste Rules and the HW Rules, explicitly refer to authorisations being valid for five years.

Restrictions on transfer

Consent orders and environmental clearances (obtained under the EIA Notification) are readily transferable, and a straightforward procedure applies:

- The transferor must provide a written no objection to the relevant regulatory authority.
- The transferee must submit an application, with an undertaking that it will comply with all the conditions in the consent order.
- Supporting documents must be provided (explaining the underlying reason of the transfer, change of name, change of management, and so on).

Penalties

Failure to obtain the required consent order will incur penalties. For instance, under the Water Act, any person who breaches the consent application process is punishable with imprisonment for at least 18 months, which can be extended to six years, and a fine. Any company operating without a consent to establish or operate will immediately receive a closure notice from the relevant SPCB.

Under directions from the NGT, the CPCB recently devised a formula to compute environmental compensation to be levied on the defaulting industry. The formula is based on the anticipated severity of pollution, the duration of the violation (number of days), the scale of the operation and the location (for example, proximity to large habitations).

Moreover, the Supreme Court and the state high courts can and do impose exemplary damages for damage to the environment. For instance, in the *Sterlites Industries case (2013)*, one of the largest copper smelter plants in India was found to be operating without a valid renewal of its environmental consent to operate. When assessing the company's liability to pay damages (that is, for damage caused to the environment during the 15 years it operated without a valid environmental permit), it reviewed the company's annual report, and determined that 10% of the profit before depreciation, interest and taxes (PBDIT) had to be paid as compensation, which amounted to INR1 billion.

The Water Act, Air Act and EP Act all contain specific provisions for offences committed by companies. Under these Acts, every person who is in charge when an offence is committed, and is responsible to the company for the conduct of its business, is guilty of the offence and liable to be prosecuted and punished accordingly. However, a person is not liable if he proves that the offence was committed without his knowledge, or that he exercised all due diligence to prevent the offence.

Further, if the offence was committed with the consent or connivance, or is attributable to any neglect by a director, manager, secretary or other officer of the company, the other person is also guilty of the offence, and liable to be prosecuted.

Importantly, the National Green Tribunal Act, 2010 (NGT Act) contains penalty provisions which are considerably higher compared to previously adopted environmental laws. Most likely all existing environmental laws will be amended (at some point) to be aligned with the NGT Act penalty provisions.

More specifically, section 26(1) of the NGT Act states that a person who fails to comply with an order or award or decision of the Tribunal is punishable with imprisonment for a term up to three years, or with a fine up to INR10 crore, or both (one crore is equal to ten million).

If the failure or contravention continues, an additional fine applies up to INR 25,000 for every day the failure/contravention continues, after conviction for the first failure or contravention.
Section 26(2) of the NGT Act states that if a company fails to comply with any order or award or decision of the Tribunal, the company is punishable with a fine up to 25 crore rupees. If the failure or contravention continues, an additional fine applies up to INR100,000 for every day the failure/contravention continues, after conviction for the first failure or contravention.
The NGT has jurisdiction over all civil cases where a substantial question relating to the environment is involved, arising out any of the exhaustively enumerated environmental laws specified in Schedule I to the NGT Act (including the EP Act (and the rules adopted under it), the Water Act, the Air Act, the Forest Act, the EIA Notification Act, and so on) (*section 14(1 NGT Act*).
Under section 15(1) of the NGT Act, the NGT can order relief, compensation and restitution in the following cases:

- Relief and compensation to the victims of pollution and other environmental damage.
- Restitution for property damaged.
- Restitution of the environment.

Further, the NGT can divide the compensation or relief payable under separate heads specified in Schedule II of the NGT Act, which includes claims:

- Due to harm, damage or destruction to flora, including aquatic flora, crops, vegetables, trees and orchards.
- Including cost or restoration of account of harm or damage to the environment including pollution of soil, air, water, land and eco-systems.

Water pollution and abstraction

6. What is the regulatory regime for water pollution (whether part of an integrated regime or separate)?

Regulators

The regulators for water pollution matters are the following:

- State Pollution Control Board (permission to establish and operate).
- Central Ground Water Board (for permission to extract groundwater).
- Municipal Corporations/State Public Works Department (who are responsible for water supply and sewerage systems).

Permits and regulator

A company must obtain a CTE at the planning stage but before any construction, followed by a CTO before commencement of any activities/operations.

Prohibited activities

No person must knowingly cause or permit any poisonous, noxious or polluting matter (determined under standards laid down by the CPCB, or complemented by the standards of the SPCBs) to enter, directly or indirectly, into any stream, well or sewer, or on land (see the Water Act). Similarly, a person must not cause or permit any other matter to enter into a stream, which may (directly or with similar matter) impede the proper flow of the water of the stream, in a manner leading or likely to lead to a substantial aggravation of pollution due to other causes or its consequences. These broadly drafted provisions of the Water Act tend to cover a wide range of activities which may cause or aggravate water pollution.
The Water Act and Air Act also impose a strict information accident reporting and preventing obligation on industries. If due to an accident or other unforeseen event any poisonous, noxious or polluting matter is discharged, or is likely to be discharged into a stream, well, sewer, or on land, which causes or is likely to cause water pollution, the person in charge must immediately notify this to the relevant State Pollution Control Board (*see sections 31 and 32, Water Act*).

Clean-up/compensation

Companies who cause water pollution can be ordered to clean up the pollution caused and pay compensation to remedy the polluted environment, or to possible victims.
There are various possible approaches. For instance, if a SPCB believes that water or soil pollution is about to be caused, it can apply to a court for a restraining order. The court can then order the entity that is about to or that has caused the water pollution to refrain from doing so or to remove it. If the party fails to act, the court can also authorise the SPCB to remove the water pollution. Any expenses incurred by the SPCB are then recoverable from the party that has caused the pollution.
Similarly, in an emergency the SPCB can act immediately to prevent, remove or mitigate the water pollution, and all expenses are recoverable from the person causing or failing to effectively prevent the water pollution.
Most significantly, the SPCBs have power to issue far-reaching directions, which include:

- Closure of the company, or at least the part or process of the company that is causing the pollution (which can extend to the stoppage of an entire manufacturing process, until the pollution has been addressed).
- Stopping the electricity or water supply to the company.

These powers are often relied on by the regulatory authorities, particularly when companies fail to reply or adequately respond to written show cause notices that precede these actions.

Companies can approach courts to obtain a stay order against these closure notices, or can appeal against directions to the state appellate authority and/or NGT (it has four zonal benches throughout India).

Penalties

Apart from penalties for not having a valid environmental permit/consent (*see Permits and regulator*), the Water Act has the following penalty provisions.

Non-compliance with closure direction. The Water Act and Air Act provide that whoever fails to comply with a closure direction or stoppage (of electricity and water) direction is liable to imprisonment for a term of at least one and a half years up to six years and a fine. If the breach continues, an additional fine up to INR 5,000 for every day of non-compliance can be imposed.

Other offences. The Water Act and the Air Act set out various other offences, such as:

- Failure to provide information to the Pollution Control Boards.
- Failure to notify an accident.
- Knowingly or wilfully making a false statement.
- Wilfully tampering with monitoring equipment.

They are all punishable with imprisonment for a term up to three months, or a fine up to INR 10,000, or both.

Residuary penalty. A person who breaches the Water Act or the Air Act, or fails to comply with any order or direction with no specific penalty, is punishable with imprisonment up to three months, or a fine up to INR10,000, or both. If the failure continues, an additional fine can be imposed up to INR5,000 per day.

EP Act and the NGT Act. Unlike the Water Act and the Air Act, the EP Act, which is the umbrella act for the numerous rules adopted under it, such as the HW Rules (*see Question 19*), provides only one type of punishment. Any breach of the rules under the EP Act is punishable with imprisonment up to five years, or a fine up to INR100,000, or both.

However, amounts imposed by courts are now significantly higher already.

Under the NGT Act, NGTs have the power to order:

- Relief and compensation to the victims of pollution.
- Restitution of damaged property.

- Restitution of the environment.

These amounts are in addition to amounts payable under the Public Liability Insurance Act 1991. Moreover, NGTs can divide the compensation payable under the following separate heads as specified in Schedule II of the NGT Act:

- Death.
- Permanent/temporary disability or other injury or sickness.
- Medical expenses incurred for treatment of injuries or sickness.
- Damages to private property.
- Loss and destruction of any property other than private property.
- Expenses incurred by the government or a local authority in providing relief, air and rehabilitation to the affected persons, or compensation for environmental degradation and restoration of the quality of the environment.
- Claims including cost of restoration on account of any harm or damage to the environment, including pollution of soil, air, water, land and ecosystems.
- Claims on account of any harm, damage or destruction to fauna and aquatic fauna and flora, crops, vegetables, trees and orchards.
- Loss of business or employment, or both.
- Any other claim arising out of or connected with any activity of handling hazardous substances.

Most significantly, the NGT Act provides that anyone who fails to comply with any order or award of the NGT Act is punishable with imprisonment for a term up to three years, or a fine up to INR100 million, or both. If the failure or breach continues, an additional fine can be imposed up to INR25,000 per day.

The penalty under the NGT Act is even stricter for companies. If a company fails to comply with an order or award of the NGT, it is liable to a fine up to INR250 million, and an additional fine up to INR100,000 for each day the breach continues.

Further, the CPCB has recently devised a formula for calculating the environmental compensation to be levied on the defaulting industry (*see Question 5*).

7. What is the regulatory regime for water abstraction (whether as part of an integrated regime or separate)?

Permits and regulator

The Central Ground Water Authority. under the Ministry of Jal Shakti Department of Water Resources, River Development and Ganga Rejuvenation, is the body responsible for the supervision of water abstraction.

The regulation of ground water development in notified areas is conducted by district administrative heads assisted by Advisory Committees under the provisions of section 4 of the EP Act. All issued pertaining to the granting of "No Objection Certificates" (NOCs) for ground water abstraction will have to be submitted to the Central Ground Water Authority.

Prohibited activities

Water abstraction is limited in the sense that the grant of a NOC for ground water extraction for drinking and domestic purposes for infrastructure projects/industries/the mining sector will be considered only on the production of a completion certificate from the competent authority. Moreover, a NOC for ground water withdrawal will be considered only in cases where the water supply department concerned is unable to supply an adequate amount of water in the area.
A NOC will not be granted to industries for the extraction of ground water for construction activities in the project in critical/over-exploited areas. Similarly, water intensive industries (like packaged drinking water, tanneries, distilleries, breweries, paper and pulp industries, fertiliser companies, water parks and amusement centres) will not be allowed to abstract water from overexploited areas.
For example, owing to the high levels of fluoride present in the groundwater of the 12 districts in Maharashtra, the National Green Tribunal has now passed an order that prohibits the unauthorised extraction of the resource for commercial use by dealers and businesses dealing in packaged water. Earlier the Tribunal had issued notices to the collector of these districts over the rampant and illegal digging of borewells in these already water-scarce areas.

Compensation

If the licensee of a NOC is not in compliance with a NOC for ground water, then this can lead to the cancellation or non-renewal of that NOC.

Penalties

Penalties can be imposed under the EP Act in the case of non-compliance in notified areas. A Show Cause Notice (SCN) or stop work order can be served on the licensee by the SPCB. Subsequently, a closure notice can be issued, if no response is given to the SCN. If there is failure to comply with the directions issued, then this can be punishable by a term of imprisonment and/or the penalties specified under the EP Act, which can result in either a prison term of up to five years, or a fine of up to INR100,000, or both.

Air pollution

8. What is the regulatory regime for air pollution (whether part of an integrated regime or separate)?

Permits and regulator

Companies must apply to the relevant SPCB for either a consent to operate under the Air Act or Water Act, or a common consent order, or an integrated environmental permit under the Air Act and Water Act.

Prohibited activities

The Air Act is similar to the Water Act, in terms of consent application management, air pollution standards set by the CPCB, and the type of infringements and penalties (*see Question 6*). State governments in consultation with SPCBs identify air pollution control areas, which determine how they approach consent applications.

Clean-up/compensation

SPCBs can order companies to clean-up air pollution and issue directions to companies for closure or stoppage of electricity or water supply, until the cause is adequately addressed. Courts and the NGTs can order compensation to be paid by companies for harm caused to the environment or people (*see Question 6*).

Penalties

The structure and penalties under the Air Act are similar to those under the Water Act (*see Question 6*).

Climate change

9. Is your jurisdiction party to the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol and/or the Paris Agreement? How are the requirements under those international agreements implemented or being implemented?

India ratified the UN Framework Convention on Climate Change in 1993 and the Kyoto Protocol in 2002. As a non-Annex-I country, India did not take part in the flexibility mechanisms for developed countries (emission trading and joint

implementation). India has been a leading host country of clean development mechanism (CDM) investments, enabling Annex-I countries to invest in emission-reducing projects in developing countries (thereby earning certified emission reductions).
As part of the COP21 negotiations and in the run-up to the Paris Agreement on Climate Change (December 2015), India submitted its Intended Nationally Determined Contribution (INDC) in October 2015, outlining its post-2020 climate actions. India's INDC includes:

- A reduction in emissions intensity of its GDP by 33% to 35% by 2030, from 2005 levels.
- Creating an additional carbon sink of 2.5 to 3 billion tons of carbon dioxide equivalent, through additional forest and tree cover by 2030.

Since then, India has taken a particularly strong lead on its renewable energy targets. The President of India announced in January 2020 that India aims to have 450GW of renewable energy by 2030, and that the country is already working towards having 175GW of renewable energy by 2022, which includes 100GW of solar energy and 60GW of wind energy.

10. Are there any national targets or legal requirements for reducing greenhouse gas (GHG) emissions? How far are the targets aligned with the 1.5 degree target in the Paris Agreement, if at all? Has a climate emergency been declared? Is there a national strategy on climate change?

Targets

India submitted its Intended Nationally Determined Contributions (INDC) to the UNFCCC on 2 October 2015. The key targets contained in India's INDCs are:

- To reduce the emissions intensity of its GDP by 33% to 35% by 2030 from the 2005 level.
- To achieve about 40% cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.
- To create an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent through additional forest and tree cover by 2030.

National strategy

In March, 2019, India launched the *India Cooling Action Plan* (ICAP), with numerous references to India's commitment to the Kigali amendment and its long-term approach to refrigerant transition and energy efficiency of air conditioning equipment and the need to phase out HCFCs, while also achieving its climate change and sustainable development goals. The ICAP document

provides a good overview of the HCFCs being phased out as part of its Montreal Protocol obligations (*see page 4, HCFC Phase-out Management Plan (HPMP) Stage – I*) and HPMP Stage II (with a focus on HCFC-22).
This builds on the 2008 National Action Plan on Climate Change.
Under the Jawaharlal Nehru National Solar Mission (JNNSM), India decided in June 2015 to increase its solar energy five-fold to reach 100,000MW, by 2022. The target mainly consists of 40GW rooftop and 60GW through large and medium scale grid connected solar power projects. The President of India announced in January 2020 that India aims to achieve 450GW of renewable energy by 2030 (*see Question 9*).
As part of the NMEEE, the Perform, Achieve and Trade (PAT) Mechanism was launched, a new market-based mechanism to promote energy efficiency among energy intensive large industries, by allowing trade in energy saving certificates (ESCerts). The Energy Conservation Act 2001 imposes specific energy consumption reduction targets for 478 designated consumers in the following industrial sectors which can take part in the PAT mechanism, including:

- Thermal power stations.
- Fertiliser.
- Cement.
- Iron and steel.
- Chloralkali.
- Aluminium.
- Textiles.
- Pulp and paper.

ESCerts can be traded among companies to meet their compliance requirements or can be banked for the next cycle of energy savings requirements. The Bureau of Energy Efficiency (BEE) was established to assist in developing policies and strategies to encourage self-regulation and market principles with the primary objective of reducing energy in the Indian economy within the overall framework of the Energy Conservation Act, 2001.
The BEE prepared the Energy Conservation Building Code (ECBC), which was adopted in June 2017 (replacing the earlier 2007 code, in line with India's Nationally Determined Contributions to reducing emissions intensity of its GDP to 35% below 2005 levels by 2030). States can alter the ECBC to their local conditions. The ECBC is voluntary at this stage but is expected to become mandatory and serve as a baseline reference for government agencies.
Further, in 2018, India also adopted the National Electricity Plan, reinforcing the government's commitment to transforming the Indian electricity sector, retaining a core target of 275 gigawatts (GW) of renewable energy by 2027, while India's coal power capacity hitting 238 GW in 2027, 11 GW lower than the 2016 forecast.

11. Do any emissions/carbon trading schemes operate?

See *Question 10*.

Renewable energy

12. Are there any national targets or legal requirements for increasing the use of renewable energy (such as wind or solar power)? Is there a national strategy on renewable energy?

To address climate change, the President of India announced in January 2020 that India aims to have 450GW of renewable energy by 2030, and that the country is already working towards having 175GW of renewable energy by 2022, which includes 100GW of solar energy and 60GW of wind energy.

13. Do any renewables support schemes operate?

The Government of India does encourage the installation of rooftop solar panels by residents by offering residents that install these a subsidy of up to 40%. Similarly, farmers receive subsidies for buying solar powered machinery.

At a macro level, the Government of India also offers Viability Gap Funding (VGF). For example, it recently offered such financial support for the setting up of 1,000MW Grid-Connected Solar PV Power Projects in the North Eastern states, including Sikkim, under the Jawaharlal Nehru National Solar Mission (JNNSM).

Energy efficiency

14. Are there any national targets for increasing energy efficiency (for example, in buildings and appliances) or legal requirements for achieving energy efficiency standards? Is there a national strategy on energy efficiency?

The Energy Conservation Act, 2001 (EC Act) provides a regulatory framework for:

- Adopting "standards and labelling" of equipment and appliances that are "energy efficient" (S&L programme).
- Energy conservation building codes for commercial buildings.
- Energy consumption norms for energy intensive industries.

The implementation of these key measures rests with the Bureau of Energy Efficiency.

Currently, the S&L programme covers 21 categories of appliances, out of which the labelling of eight appliances as energy efficient are mandatory and the remaining categories are voluntary. The mandatory S&L categories for which labelling must be conducted consists of:

- Household refrigerators.
- Direct cool refrigerators.
- Split air conditioners (ACs).

- Ceiling mounted ACs.
- Fluorescent lamps.
- Distribution transformers.
- Televisions.
- Electric water heaters.

The remaining 13 categories for which labelling is voluntary includes:

- Computers (notebooks/laptops).
- Office equipment (such as printers, copiers, scanners and so on).
- Induction motors.
- Agricultural pump sets.
- Ceiling fans.
- Domestic liquified petroleum gas stoves.
- Washing machines.
- Variable capacity ACs.
- Diesel generators.
- Diesel engine driven set pumps for agricultural purposes.
- Solid state inverters.
- LED lamps.

The Energy Conservation Building Code (ECBC) for commercial buildings was updated in June 2017 (replacing the earlier 2007 code), in line with India's Nationally Determined Contributions (INDCs) to reduce the emissions intensity of its GDP to 35% below 2005 levels by 2030. States can alter the ECBC to their local climatic conditions. The ECBC is voluntary at this stage, but some states have gone ahead and made the provisions of the ECBC for commercial buildings mandatory (including Rajasthan, Odisha, Uttarakhand, Andhra Pradesh, Punjab, Telangana, Haryana, West Bengal, Karnataka, the Union Territory of Puducherry, Assam and Kerala).

In 2018, India also launched the Energy Conservation Building Code for residential buildings. The Ministry of Power believes the implementation of this code will have the potential to make energy savings equating to 125 billion units of electricity per year by 2030 (which is equivalent to about 100 million tonnes of Co2 emissions).

15. Do any mandatory or voluntary labelling schemes exist to identify energy efficient goods or buildings?

Both mandatory and voluntary labelling schemes currently exist in India (see *Question 14*).

Currently, the S&L programme covers 21 categories of appliances, out of which the labelling of eight categories of appliances are mandatory and the remaining categories are voluntary. For a list of both the mandatory and voluntary categories of appliances, see *Question 14*.

16. Do any energy efficiency support schemes operate?

No, the energy efficiency approach in India does not include the operation of any support schemes, as the approach is largely market driven.

Environmental impact assessments

17. Are there any requirements to carry out environmental impact assessments (EIAs) for certain types of projects?

Scope

Many activities require a prior environmental clearance, and some also require a detailed EIA study (many also involve a public consultation component), including:

- Mining of minerals.
- Offshore and onshore oil and gas exploration, development and production.
- Oil and gas transportation pipelines.
- Thermal power plants.
- Nuclear power projects and processing of nuclear fuel.
- Metallurgical industries (ferrous and non-ferrous).
- Asbestos milling and asbestos-based products.
- Chlor-alkali industry.
- Chemical fertilisers.
- Pulp and paper industry.
- Sugar industry.
- Building and construction projects.
- Townships and area development projects (exempted from the public consultation phase).

Permits and regulator

The Environment Impact Assessment Notification 2006 identifies various activities where prior environmental clearance must be obtained by the project proponent. The activities are classified into two categories, A and B, based on the spatial extent of potential impacts and potential impacts on human health and natural and man-made resources.

New projects and the expansion and modernisation of existing projects falling under the relevant activities require prior environmental clearance:

- Category A activities require clearance from the Central Ministry of Environment, Forests and Climate Change (which bases its decision on the recommendation of the Expert Appraisal Committee).

- Category B activities require clearance from a state-level EIA Authority which bases its final decision on the recommendation of the state-level Expert Appraisal Committee). Category B is further sub-divided into Category B1 projects, which require an EIA, and Category B2 projects which do not require an EIA study/report (neither require public consultation).

There are four stages to obtain an environmental clearance:

- Stage 1 screening (only for Category B projects and activities).
- Stage 2 scoping.
- Stage 3 public consultation.
- Stage 4 appraisal.

Public hearings are not required for some projects, such as:

- Modernisation of irrigation projects.
- Projects in industrial estates or parks.
- Expansion of roads and highways not needing further land acquisition.
- Building, construction, area development and townships.

An Expert Appraisal Committee (EAC) or State Level Expert Appraisal Committee (SEAC) must complete its assessment and make a recommendation within 60 days from receipt of all required documents and completion of the public hearing. The regulatory authority will consider the recommendations of the EAC or SEAC and notify its decision to the applicant within 45 days of receipt of the recommendations of the EAC or SEAC (that is, within 105 days of receipt of the final environment impact assessment report).

For projects which do not require an environment impact assessment (B-2 projects, identified by the SEAC in stage 2 scoping stage), the final decision must be notified within 105 days of receipt of the complete application with the required documents.

The prior environmental clearance granted for a project or activity is valid for:

- Ten years for river valley projects.
- The project life estimated by the EAC or SEAC, subject to a maximum of 30 years for mining projects.
- Five years for all other projects and activities.

It is mandatory for the project management to submit half-yearly compliance reports on the terms and conditions in the environmental clearance.

A prior environmental clearance granted for a specific project or activity to an applicant can be transferred during its validity to another legal person entitled to undertake the project or activity. Transfer is made on application by the transferor, or by the transferee with a written no objection by the transferor, to the relevant regulatory authority, on the same terms and conditions and for the same validity period. No reference to the EAC or state-level EAC is necessary in such cases.

Penalties

Because the EIA Notification 2006 was issued under the EP Act, the penalties in the EPA Act apply in the case of an infringement of the EIA Notification 2006 (*see Question 6*).
The Supreme Court of India, has in some cases levied 10% of the project cost as environmental compensation in cases where the construction was initiated without having a valid EC for the project and in some instances demolition orders have also been passed by the courts categorising the construction as illegal.

Habitats and biodiversity

18. What requirements and regimes apply for the conservation of nature, habitats and biodiversity that affect development? What assessments or obligations are required before any development begins?

Requirements and regimes

India is a party to the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat 1971, has various Ramsar sites, and has adopted the domestic Wetlands (Conservation and Management) Rules, 2017. Under the Wetlands Rules, wetlands must be conserved and managed in accordance with the principle of "wise use" as determined by the Wetlands Authority. It is prohibited to convert wetlands for non-wetlands uses, and the setting up of any industry (or the expansion of any existing industries) is also prohibited on wetlands. There are many court cases concerning the wrongful usage of wetlands, and the courts impose severe penalties on offenders. Any Environmental Impact Assessment Report will also need to map the presence of wetlands.
All industries must also take into account the provisions of both the Forest (Conservation) Act, 1980 and the Wildlife (Protection) Act, 1972, to assess whether their activity can take place in a particular location.

Prior assessments and obligations

India became a party to the United Nations Convention on Biological Diversity 1992 in May 1994, and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization 2010 in October 2014, and has adopted the Biological Diversity Act, 2002 (BD Act) (and

related rules under it) to implement these measures. A major distinction which runs throughout the BD Act is whether the access to genetic resources is sought by "foreign individuals, institutions or companies" or Indian entities, and ensuring that there is an equitable sharing of benefits arising from the use of these resources to India and its people. As a result, a prior approval must be obtained from the National Biodiversity Authority by foreign persons/companies to undertake certain activities.

Waste and the circular economy

Regulatory regime

19. What is the regulatory regime for waste?

Permits and regulator

Specific permits, consents or authorisations must be obtained by various parties generating or handling waste, under the following key waste-management laws:

- Solid Waste Management Rules, 2016.
- Plastic Waste Management Rules, 2016.
- E-Waste (Management) Rules, 2016.
- Bio-Medical Waste Management Rules, 2016.
- Construction and Demolition Waste Management Rules, 2016.
- Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.
- Batteries (Management and Handling) Rules, 2001.

Prohibited activities

The waste rules make it mandatory to obtain a prior consent or authorisation from the SPCB (in most cases) or CPCB (for example for the producer under the E-Waste Rules).

Operator criteria

Most environmental laws, including the HW Rules, refer to the term occupier, defined as the person who in relation to any factory or premises has control over the affairs of the factory or the premises, and includes in relation to a hazardous substance the person in possession of the substance or waste.

Special rules for certain waste

Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016. This is in many ways the most comprehensive of the waste management rules, as it covers the generation, handling, storage, transport, recycling, disposal, and import/export of hazardous waste.
The HW Rules impose detailed obligations on the occupier for the management, storage, packaging, labelling and transport of such waste. All parties involved must sign a movement document (or manifest system), and copies of it must be submitted to the SPCB.
Every occupier/owner/manager of any site dealing with or generating hazardous waste is required to have a hazardous waste authorisation or permit from the relevant SPCB to handle, generate, dispose of, recycle, reuse or carry out any other activity involving hazardous waste.
The HW Rules contain a separate chapter on the import and export of hazardous waste, for which prior approval must be obtained from the MoEFCC. The MoEFCC in its review of applications is assisted by a technical review committee, which meets at regular intervals and reviews each import/export application.
The definition of hazardous waste is detailed, with a strong focus on whether the material exhibits or triggers certain hazardous characteristics.
Plastic Waste Management Rules 2016. The Plastic Waste Management Rules 2016, replacing the 2011 Rules, is wider in scope, and:

- More clearly imposes obligations on "brand owners", "producers" and "importers".
- Introduces the notion of extended producer responsibility, in the context of plastic waste management.
- Covers for the first time "waste generators", which includes every person generating waste.
- Explicitly refer to "waste pickers", an important element since the waste management sector or the segregation of it is largely not formally regulated. The failure of earlier waste management rules to acknowledge this segment has often undermined effective implementation of waste rules. This is also true for the management of e-waste.

E-Waste (Management) Rules 2016 (E-Waste Rules). The E-Waste Rules entered into force on 1 October 2016.
The new E-Waste Rules apply to every:

- Manufacturer, producer, bulk consumer, other consumer, collection centre, refurbisher, dismantler and recycler.
- Dealer and e-retailer involved in the manufacture, sale, transfer, purchase, collection, storage and processing of e-waste or electrical and electronic equipment (EEE), as detailed in Schedule I to the E-Waste Rules.

An important improvement is that a producer can now obtain one centralised extended producer responsibility authorisation from the CPCB, instead of one from each SPCB where it has a market presence.
Another key change is that the operator can fulfil its extended producer responsibility obligation by becoming a member of the newly created Producer Responsibility Organisation, or of an e-waste exchange, or both. These were introduced to facilitate implementation of the E-Waste Rules, given the failure by industry to create effective mechanisms to implement the earlier Rules (adopted in 2011).

Penalties

The Environmental Protection Act, 1986 (EP Act) the umbrella Act for numerous rules adopted under it such as the waste rules, provides for only one type of punishment. Any breach of these rules is punishable with imprisonment for a term up to five years, or a fine up to INR 100,000, or both (*see Question 6*). Importantly, the NGTs can impose significantly higher penalty amounts on companies for non-compliance with their directions. If a company fails to comply with any order or award of the NGT, the company is liable to a fine up to INR25 million, and an additional fine up to INR 100,000 for each day the breach continues. It is expected that the EP Act and all other environmental laws will at some point incorporate the penalty amounts identified under the NGT Act.

National strategy, targets and producer responsibilities

20. Is there a national strategy to tackle particular types of waste (such as plastics waste or marine litter)? What waste targets exist? What producer responsibility schemes exist?

National strategy

As discussed in *Question 19*, the Plastic Waste Management Rules and the E-Waste Rules explicitly refer to the extended producer responsibility, and both Rules have been adopted at central level and apply throughout India. Some states have moved even further beyond these provisions and banned single-use plastic altogether.

Targets

The E-Waste Rules, unlike the Plastic Waste Management Rules, does contain specific e-waste collection targets which must be achieved by the producers as part of their obligations as members of the Producer Responsibility

Organisation, starting with 10% of the quantity of waste generated and going up to 70% by the year 2023.

Producer responsibility schemes

See *Question 19*.

Asbestos

21. What is the regulatory regime for asbestos?

Prohibited activities

The Supreme Court imposed a ban on the manufacturing and mining of blue and brown asbestos in 2011 (*Kalyaneshwari v Union of India, (2011) 3 SCC 287*) but India remains a major importer of white (chrysotile) asbestos, and a Public Interest Litigation (PIL) lawsuit filed to ban white asbestos was dismissed (*Consumer Education & Research Centre v Union of India, (1995) SCC 342*).
In 2014, a draft Bill, the White Asbestos (Ban on Use and Import) Bill, 2014 (Asbestos Bill) was tabled in Parliament, but has still not been adopted. The Supreme Court also addressed the harmful consequences of asbestos, making the employer responsible for paying damages to workers whose health has been affected by exposure to asbestos.

Main obligations

Owners/occupiers of premises have no specific duties to discharge for asbestos on site, other than the general occupational health and safety regulations applicable to all industries under, among other things, the Factories Act 1948 (and asbestosis has been notified as an occupational hazard under the Factories Act).

Permits and regulator

Asbestos-related activities fall into the red category, that is, the most polluting industries, and environmental permit/consent applications are reviewed accordingly by the SPCBs. A prior EC must be obtained, and a related EIA report must be prepared for industries proposing to engage in activities relating to asbestos milling and asbestos-based products.

Penalties

The penalty clause of the Asbestos Bill states that whoever violates the Bill can be punished with a maximum term of imprisonment not exceeding three years, or a fine of up to INR200,000, or both.

Contaminated land

22. What is the regulatory regime for contaminated land?

Regulator and legislation

India does not have specific legislation on contaminated land yet, although there are clear policy signals that it might adopt a tailored soil pollution/remediation legislation. As of now, the EP Act, the Water Act, the HW Rules, and extensive case law based on the polluter pays principle, form the legal basis on which regulatory authorities (SPCBs) and courts address land contamination.
A Report on the Development of a National Program for the Rehabilitation of Polluted Sites (Report) was submitted to the MoEFCC. As a first milestone of this exercise, the detailed mapping of the most polluted sites throughout India has already been undertaken. The Report also contains the draft Contaminated Sites (Identification and Management) Rules, which will provide standards for soil and water pollution, carrying out mandatory site assessment and reporting, determination of contaminated sites and related matters. This would be a significant development, and if the Rules are adopted along the same lines as currently proposed, a soil analysis and possible soil remediation would need to be undertaken in the following situations:

- As part of obtaining/renewal of a consent under the Water Act.
- As part of obtaining an Environmental Certificate.
- As part of obtaining an authorisation under the HW Rules.
- Before filing an application for a land use change.
- Before signing an agreement for the sale or lease of land.
- Before the removal of soil from a site.
- Before applying for a permit to construct on such a site.
- Before establishing new or expansion of industrial projects on any site.
- Before the commencement of demolishing any property.
- Within 60 days of signing an agreement for any change in ownership of a company, that owns or leases such a site.

Investigation and clean-up

Under the current regulatory framework there is no legal provision for declaring a site as (already) contaminated. However, where there is a discharge of an environmental pollutant exceeding the prescribed standards or this is believed to occur, due to an accident or other unforeseen event, the EP Act and the Water Act impose a notification obligation on the person in charge of the place where the discharge has occurred or is believed to occur.
These persons must prevent or mitigate the environmental pollution caused by the discharge. Similarly, SPCBs can, based on their own information or complaints filed by affected parties, order an investigation and clean-up of the soil contamination by the occupier, that is, the person currently in charge of the site.
In emergencies, the SPCBs can undertake remedial measures necessary to prevent or mitigate environmental pollution. The costs of these will be recovered from the liable persons.
NGTs have the power to order:

- Relief and compensation to the victims of pollution.
- Restitution of damaged property.
- Restitution of the environment.

Penalties

Non-compliance with directions of the SPCBs can lead to a closure notice and trigger the penalty specified under the EP Act. Non-compliance with court orders leads to even more significant penalties (*see Question 6*). If the proposed amendments under the Report are passed, the penalties will be aligned with the NGT Act, that is, penalties could be increased to:

- Imprisonment up to five years or a fine up to INR10 million, or both.
- In case of a continued failure or breach, an additional fine up to INR 25,000 for every day during which the failure or breach continues after conviction for the failure or breach.

This would enable creation of a fund for soil remediation of sites under the proposed draft Act.

23. Who is liable for the clean-up of contaminated land? Can liability be excluded in transactions?

Liable party

Because there is no specific legislation which addresses historical pollution as such, current occupiers are liable for environmental pollution, including soil pollution, affected groundwater, and so on. In relation to the regulatory

authorities this liability cannot be excluded. Contractual representations and warranties can address liability between previous and current owners of a site.
Section 9 of the EP Act states that expenses incurred by the SPBs towards the remedial measures can be recovered from the person responsible for the pollution.
Further, Rule 23 of the HW Rules identifies the occupier, importer, transporter and operator of the facility as liable for all damage caused to the environment or a third party due to improper handling of hazardous waste or disposal of hazardous waste.
The Public Liability Insurance Act 1991 imposes a statutory duty on the owners to take out an insurance policy before handling any hazardous substance, to provide immediate relief to victims in case of any accident that occurs while handling hazardous substances.
Section 4 of the Batteries (Management and Handling) Rules 2001 introduced extended liabilities to include the producers, dealers, recyclers, auctioneers, importers and consumers of batteries as responsible parties to prevent any untoward environmental degradation.

Owner/occupier liability

Since the division of liability based on historical pollution is not reflected in the environmental laws in India, the regulatory authorities and courts will hold current occupiers liable, whether they have caused the pollution or not.
The CPCB published Guidelines on Implementing Liability for Environmental Damage due to Handling and Disposal of Hazardous Waste and Penalties in the year 2016. This contains an overview of indicative liability costs for site assessment and remediation, with costs of:

- USD30,000 to USD225,000 for site assessments caused by landfill breaches and release of hazardous waste into the environment.
- USD525,000 for dumping hazardous waste on open ground.
- Remediation costs between USD150,000 and USD3,765,500.

However, under the proposed draft Contaminated Sites Rules, the owner or occupier may be excluded from liability if he proves that he did not cause or permit or handle any contaminant which caused pollution, or that he owned or occupied the site before the time of discharge of the contaminant and a different person or persons are solely responsible. The burden of proof would lie on the alleged responsible person, and that person would have to conclusively prove that he is not the liable person.

Previous owner/occupier liability

A previous occupier being liable is less common. It is more likely if, for instance, a site has been identified as causing pollution, has no current occupier, and the previous occupier can still be identified. Otherwise, the current occupier is typically liable to the regulatory authorities and courts, and claims between current and earlier occupiers must be settled contractually, unless it can be clearly established that only the previous owner caused the pollution. However, under the proposed draft Contaminated Sites Rules, the SPCB would have to determine the person responsible for contamination, and this could lead to more active investigations about past owners and their activities to ascertain their liability.

Limitation of liability

Parties can make contractual arrangements between themselves, but cannot limit their liability otherwise. The Supreme Court has evolved two far-reaching environmental liability concepts, by holding that:

- Enterprises engaged in hazardous or inherently dangerous activities are absolutely liable to compensate those affected by an accident (such as the accidental leakage of toxic gas). Such liability is not subject to any of the exceptions under the tort principle of strict liability in *Rylands v Fletcher* (that is, act of God, act of third party, consent of victim and statutory authority).
- The measure of compensation must be correlated to the magnitude and capacity of the enterprise. The larger and more prosperous the enterprise, the greater the amount of compensation payable by it for harm caused by an accident, in the carrying on of hazardous or inherently dangerous activities.

24. Can a lender incur liability for contaminated land and is it common for a lender to incur liability? What steps do lenders commonly take to minimise liability?

Lender liability

In India, lenders do not directly incur liability for environmental wrongdoing and/or remediation costs for contaminated land, unless they are directly responsible or liable for the management of the company, with a board position or substantial shareholding and involvement in the day to day running of the company. However, lenders increasingly undertake an environmental risk assessment of the projects of their customers and include contractual clauses relating to environmental compliance in their loan documents.

Minimising liability

Lenders normally undertake prior due diligence and insist on appropriate conditions before granting a loan, and require the management of the company to take timely effective measures to minimise their environmental liability.

25. Can an individual bring legal action against a polluter, owner or occupier?

It is the duty of the state to protect and improve the environment and to safeguard the forest and the wildlife of the country (*Article 48A, the Constitution*). Further, it is a fundamental duty of every citizen under Article 51(A)(g) of the Constitution to protect and improve the natural environment and to have compassion for living creatures. The courts have held that these Articles are fundamental and that the state must apply them in making laws. The courts have interpreted the fundamental right to protection of life and personal liberty to include the rights to a wholesome environment.

As a result, PIL filed by concerned citizens or non-governmental organisations based on the fundamental right to a clean environment, is routinely filed in the courts, and has to a large extent influenced environmental law in India.

The courts are very proactive, and even take up environmental issues on their own initiative merely based on news articles covering environmental issues. They often tend to influence if not determine environmental policies, particularly when the executive has failed to fulfil its obligations.

Many citizens also obtain information regarding the status of environmental projects and their environmental permits through the Right to Information Act 2005. This requires all government departments/agencies to promptly give a substantive and reasoned reply to any questions asked by any citizen (with a few exceptions, such as trade secrets).

Environmental liability and asset/share transfers

26. In what circumstances can a buyer inherit pre-acquisition environmental liability in an asset sale/the sale of a company (share sale)?

Asset sale

A buyer inherits, in the normal course as the owner, any pre-acquisition environmental liability of the company relating to the asset, for example, contaminated water or land, or pre-existing environmental concerns involving payment of damages or compensation or remedial measures.

Share sale

An action for breach of environmental laws is against the target company, so impacts on the buyer would affect the profitability of the company and its dividend paying capacity.

27. In what circumstances can a seller retain environmental liability after an asset sale/a share sale?

The seller retains environmental liability even after an asset sale if he was convicted of a criminal offence under the environmental laws before the sale (*see Question 23*). The seller can also contractually retain environmental liability and, for example, commit to pay compensation or other remedial measures.

28. Does a seller have to disclose environmental information to the buyer in an asset sale/a share sale?

Asset sale

Usually there is no legal obligation on the seller to disclose environmental information to the buyer, particularly if the sale is on an "as is where is" basis. The seller is only bound to make disclosure where sale documents contain specific representations and warranties from the seller about environmental violations/compliance, past, existing or potential, backed with indemnities, failing which the seller can be liable for a breach or incomplete disclosure.

Share sale

The position is similar to that for an asset sale, if there is a share purchase agreement providing for representations and warranties (*see above, Asset sale*).

29. Is environmental due diligence common in an asset sale/a share sale?

Scope

It has now become common for buyers in India to undertake environmental due diligence in an asset sale with environmental law implications. In particular due to the active functioning and faster case management of the NGTs, public interest litigation and heavy penalties for environmental infringements and non-compliance with NGT Orders (*see Question 6*).

Environmental due diligence covers investigations of all issues under environmental laws, particularly:

- Air, water pollution and land/water contamination (including any risk of off-site groundwater contamination).
- Practical and financial implications.

- Identification of the potential risk or threat.
- Estimation of the amount of penalties and remediation costs involved.

Types of assessment

Environmental Impact Assessments (EIA) are an important management tool for ensuring optimal use of natural resources for sustainable development, and a prerequisite for many new and expansion projects in India. The MoEFCC has prepared numerous sectoral EIA Guidelines.

Environmental consultants

EIAs can only be undertaken by consultants duly accredited by the Quality Council of India/National Accreditation Board of Education and Training (QUI/NABET).
Registration of QCI accredited consultants is valid for the period of accreditation, up to three years. Accredited consultants are allowed to appear before the:

- Expert Appraisal Committee (at Central level), for Category A Projects.
- State Level Expert Appraisal Committee or State Environment Impact Assessment Authority, for Category B projects.

Approved EIA consultants and co-ordinators only engage in the approved sectors, as authorised by the QCI.
Accredited environmental consultants must be used for conducting EIAs in various sectors. The terms of reference or letters of engagement containing the scope of work vary, due to the purpose of the engagement and level of activity involved. Besides standard clauses, all relevant issues should be clearly covered in the engagement letter or contract, which can include:

- Performing the services with the degree of care, skill and diligence generally accepted in the performance of such services.
- Obtaining insurance for himself and his workers, for a specified amount.
- Maintaining confidentiality.
- Ownership of records and reports to remain with the client.
- Disposing of sample material and sample residuals after a specified period.
- Mutual indemnity.
- Limitation of liability of the consultant to the client, for all claims arising out of or in any way relating to services limited to direct damages and/or to specific liability.

- Representation of the consultant that he and his workers have the capability, experience, means and appropriate licences and permits required to perform the services contemplated by the agreement.
- No unauthorised release of information to any third party.
- Capability and competence to make proper representations before the concerned authorities, and to obtain consents, permits and approvals.
- Not carrying out illegal practices, payment of bribes, and so on.

30. Are environmental warranties and indemnities usually given and what issues do they usually cover in an asset sale/a share sale? Are there usually time limits or financial caps on environmental warranties and indemnities?

Asset sale

Environmental warranties and indemnities are normally given in asset sales involving environmental issues, such as air, water pollution, land and water contamination, when agreed by the parties. They cover all appropriate issues relating to compliance and violations of environmental laws, including:

- Status of show cause notices received from the SPCBs or other environmental authorities and actions taken to address the issues raised in these show cause notices.
- Whether any investigations have taken place in the past or are being conducted or expected in future.
- Any past violations or penalties imposed.
- Whether any cases are pending before the authorities and courts, and their status.
- Extent of liability and potential liability in terms of violation of environmental laws and punishments, both criminal and civil.
- The amount of indemnities, which may be based on expert reports of potential liability, and subject to negotiation between the parties and the insurance company.
- The size of the green belt area and available land for further expansion.

Share sale

Provision can be made for indemnities in the share purchase agreement. Indemnities can be reflected in a discounting of the purchase price of the shares, or buy back of the shares.

Limits on environmental warranties and indemnities

Legally, there are no limits on environmental warranties and indemnities. Sellers typically want a cap on the amount and period of environmental warranties and indemnities. Insurance companies also want this capped, to enable them to decide the amount of the insurance policy premium. Buyers understandably want very high limits and unlimited time periods for warranty claims, due to:

- The time taken in court cases.
- The increasingly high penalties for violation of environmental laws and active functioning of the environmental courts, particularly the NGTs.

Reporting and auditing

31. Do regulators keep public registers of environmental information? What is the procedure for a third party to search those registers?

Under the Right to Information Act, 2005 (RTI Act), a citizen can request any government authorities to provide any specific information which they hold, for a nominal fee. There are some exemptions to this otherwise broadly-drafted right to information, such as:

- Personal information of public officers.
- Evidence yet to be presented in a court of law.
- Commercially confidential information, trade secrets or intellectual property, the disclosure of which would harm the competitive position of a third party, unless the competent authority is satisfied that the larger public interest warrants the disclosure of such information. For example, if residents filed an RTI petition seeking information about a company's off-site groundwater pollution, the larger public interest would warrant that all information available to the government authority should be shared with the citizens who seek its provision.

Public registers

The concept of public registers for tracking environmental pollution is not yet entrenched in India. EIA draft reports would need to be available to the public living in the vicinity of the proposed project/activity. However, there are increasing efforts by the CPCB and SPCBs to publish such information on their websites, for example:

- Reports of the inspections conducted on the industrial units.
- A list of closure notices issued.
- Directions issued by the CPCB to its subordinates.
- Compliances with court orders.

- Environmental monitoring data.
- Water quality of prominent rivers throughout the country.
- A list of non-complying or non-responsive companies.
- Status of pending and rejected consent and authorisation applications.

The same is true for authorities in charge of environmental clearance applications that require EIAs to be submitted.

Third party procedures

Citizens typically rely on the Right to Information Act 2005 to obtain information from a public authority, and do not need to justify this request. This is a very effective route, and is often used by citizens to obtain information on the status of environmental permits, show cause notices, status of remediation, and so on.

32. Do companies have to carry out environmental auditing? Do companies have to report information to the regulators about environmental performance?

Environmental auditing

Companies must submit an annual environmental statement to the SPCB from which they obtained the relevant consent or authorisation. This is an effective control mechanism for the authorities to assess whether processes and pollution levels comply with conditions specified in the consent orders. The environmental statement must include information on the:

- Industry's operation or process.
- Water and raw material consumption.
- Pollution discharged into the environment (name of pollutants, quantity discharged, concentration, and the percentage of variation from the prescribed standards and the reasons for deviation).
- Details of hazardous waste and solid waste generated (along with the characteristics of the waste).
- Impact of pollution control measures taken on conservation of natural resources, as well as on production costs.
- Any additional measures/investment proposals for environmental protection, including abatement of pollution.

Reporting requirements

For the information and accident information requirements relating to pollution or believed pollution, see *Question 6*. They are imposed by almost all environmental laws.

33. Do companies have to report information to the regulators and the public about environmental incidents (such as water pollution and soil contamination)?

The EP Act, the Water Act, and the HW Rules all impose accident reporting obligations. Additionally, annual environmental statements must be submitted by consent holders to the SPCBs (*see Question 6*).

34. What powers do environmental regulators have to access a company?

SPCB officers have the power to enter and inspect any place, to:

- Examine any plant, record, register, document or other material object.
- Search any place in which he has reason to believe that an offence has or is about to be committed.

The Code of Criminal Procedure 1973 applies, since it applies to searches and seizures under the authority of a warrant.

35. What obligations are there on companies to report on environmental issues in their annual corporate records?

The Companies Act, 2013 and the Regulations issued by the Securities and Exchange Board of India (SEBI) do impose various environmental and/or energy conservation related reporting obligations. All companies (independent of their size or turnover) must include in their annual report by the board of directors (which is attached to the annual financial statement) information on any actions taken to improve energy conservation. The Companies Accounts Rules, 2014, further specify that the report of the board of directors must include information on:

- The steps taken in regard of, or that have an impact on, the conservation of energy.
- The steps taken by the company on using alternate sources of energy.
- The capital investment made on energy conservation equipment.

There are additional disclosure requirements for listed companies in their annual reports. Regulation 32(4)(f) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015 states that for the top 100,000 listed entities (based on market capitalisation), the business responsibility report must describe the initiatives taken by them from an environmental, social and corporate governance perspective. Other companies which have listed their specified securities on the SME Exchange can also include these business responsibility reports on a voluntary basis.

The Companies Act also introduced a mandatory corporate social responsibility (CSR) obligation where a company meets any one of the following financial criteria:

- A net worth of INR5 billion or more.
- A turnover of INR10 billion or more

- A net profit of INR50 million or more during any financial year.

Under the Companies (Corporate Social Responsibility Policy) Rules, 2014, every company (including its holding company or subsidiary), and any foreign company which has its branch office or project office in India, which fulfils any of the three financial criteria set out above in the Companies Act, must also form a CSR Committee of the Board (CSR Committee) which has three or more directors (and at least one of them must be an independent director).

The CSR Committee must formulate a CSR policy and recommend it to the board of directors and indicate the CSR activities to be undertaken (which it must select from the exhaustively enumerated CSR activities contained under Schedule VII of the Act). The board of directors must approve the CSR policy and disclose the same in the directors' report.

Most importantly, under section 135(5) of the Companies Act, the board of directors must ensure that the company spends at least 2% of the average net profits made during the immediately preceding three financial years in the pursuance of its CSR policy. In addition, when spending the committed CSR funds, preference must be given to the local areas around which the company operates. Only activities undertaken in India will be able to be classified as CSR expenditure.

If the company fails to spend any of its CSR funds, the company must specify the reasons for not spending the unspent amount in its directors' report. While there is no penalty for failing to spend on CSR, there are penalties for failing to report on the CSR activities conducted and for failing to explain why any CSR spending was not carried out.

The Companies (Amendment) Act, 2019 (notified on 31 July 2019) did introduce a penalty provision for non-compliance with the CSR obligation, but the date of entry into force of this provision has not yet itself been notified, and given the active lobbying against it, it may or may not be introduced in the near future.

36. What mandatory GHG, carbon reporting or transparency requirements apply to corporates, including as part of their annual corporate reporting requirements? Is reporting in accordance with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations? Do any voluntary GHG reporting schemes exist?

There are no mandatory GHG reporting obligations, but there are several industry-driven voluntary initiatives, such as the India GHG Reporting initiative launched by:

- The World Resources Institute of India.
- The Confederation of India Industry.
- The Energy and Resources Institute (TERI).

37. What corporate governance requirements apply in relation to climate change?

There are no corporate governance requirements pertaining to climate change which are mandatory at the present time. However, a lot of capacity building is taking place in India around the Task Force on Climate-related Financial Disclosures (TCFD) recommendations and several larger (and more global) companies may adopt these in the near future.

Environmental insurance

38. What types of insurance cover are available for environmental damage or liability and what risks are usually covered? How easy is it to obtain environmental insurance and is it common in practice?

Types of insurance and risk

The Public Liability Insurance Act 1991 requires an insurance policy to be taken out by owners, users or transporters of hazardous substances, as defined under the EP Act, which exceed the minimum quantity specified in the Public Liability Insurance Act. The public liability policy can be extended to cover pollution risk subject to a no objection certificate from the SPCB.
Under the Public Liability Insurance Act, the any one accident (AOA) must represent the paid-up capital of the company, subject to a maximum of INR50 million. The AOA limit is fixed at maximum INR150 million. Under the Public Liability Insurance Act, the excess of any award that exceeds the AOA limit is paid by the government through the Environment Relief Fund. The insured must contribute an amount to this fund which is equivalent to the premium paid under the Public Liability Insurance Act Policy.
There is no standard insurance policy issued by all insurance companies but there are various types of insurance cover for environment damage or liability, as negotiated between the insurance company and the client.

Obtaining insurance

While insurance under the Public Liability Insurance Act is mandatory, others are subject to negotiation and finalisation between the insurance company and those seeking to obtain appropriate insurance.

Environmental taxes

39. What are the main environmental taxes?

At present, there are no direct green taxes or environmental taxes imposed on environmental pollutants, or on goods whose repeated use contributes to pollution.
Until recently, a carbon cess was levied on every tonne of coal mined or imported (at INR400 per tonne). A portion of the collected carbon cess was then further disbursed to the National Clean Energy Fund. However, with the newly introduced Goods and Services Tax (GST) regime (rolled out on 1 July 2017) the cess will be used instead for the GST Compensation Fund, meant to compensate state governments for any loss in revenue arising out of the new GST regime.
From 2016, the Supreme Court of India has imposed 1% of ex-showroom price as Environment Compensation Cess on diesel vehicles having an engine capacity greater than 2000 CC in Delhi-NCR. On similar lines, an Environment Compensation Charge (ECC) is also being levied on HGV vehicles entering the National Capital Territory of Delhi.
All project proponent/user agencies must pay a contribution to the Compensatory Afforestation Fund Management and Planning Authority Fund (CAMPA-Fund) when a request is made for diversion or de-notification of forest land for non-forest purposes. The authority can only use the fund for afforestation activities.

Reform

40. Are there any proposals for significant reform of environmental law?

A draft National Action Plan on Chemicals (called "India REACH") has been drafted and will be published shortly for public comments. The final version is expected in 2020. This National Action Plan on Chemicals will:

- Address the environmentally safe management of chemicals throughout the country.
- Establish a National Chemical Inventory.
- Propose a merger of the Chemical Accidents (Emergency Planning, Preparedness, And Response) Rules, 1996 (CAEPPR rules) and the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989 (MSIHC rules) to streamline the legislation, resulting in effective implementation and the safer handling of hazardous chemicals throughout the country.

The MoEFCC has developed a National Clean Air Programme which is adopted at central level for strategies for reduction in air pollution levels at both regional and urban scales.
The most awaited environmental reform would be a law addressing soil pollution directly (*see Question 22*). This would need to be factored in by all

companies in their environmental risk analysis as part of any new project, internal environmental management system and environmental due diligence.

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Publications

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