



---

# Forest and Environment Clearances: Problems for economic growth or problems for environmental protection: **Part II**

**Centre for Science and Environment, New Delhi**



## Our study

---

**In September 2011, CSE analysed data on environment and forest clearances to check on the following:**

- 1. The scale of clearances granted in the country?**
- 2. The cumulative impact of these individual projects?**
- 3. Are the systems working to safeguard the interests of people and environment?**



## Our findings

---

- **The scale of green clearances has been unprecedented in the past 5 years.**
- **Green clearances are not holding up growth.**
- **Green clearances are not working to safeguard the environment.**



# Our recommendations

---

- Green clearances need urgent reform to work for environmental objectives:
  1. Clearance process is **not transparent or accountable**
  2. Public hearing are **not hearing** people
  3. Conditions set at the time of clearance **are not monitored**

# Follow up 2011: what we did?

---



1. Created a continuous monitoring system to track project-wise environmental clearances
2. System also tracks public hearings: video recording done from event
3. Data on projects, critique of EIA, impacts on land and water, people
4. Research on how to improve the system



---

**[Greenclearancewatch.org](http://Greenclearancewatch.org)**



## What we find:

---

1. Updated data to end of 11<sup>th</sup> FYP plan shows that in this period, green project clearance unprecedented
2. Collated and linked data for environment and forest clearance for individual projects confirms findings
3. We find scale and pace massive
4. In sector after sector, we find projects cleared, but not commissioned (**Coalgate again?**)



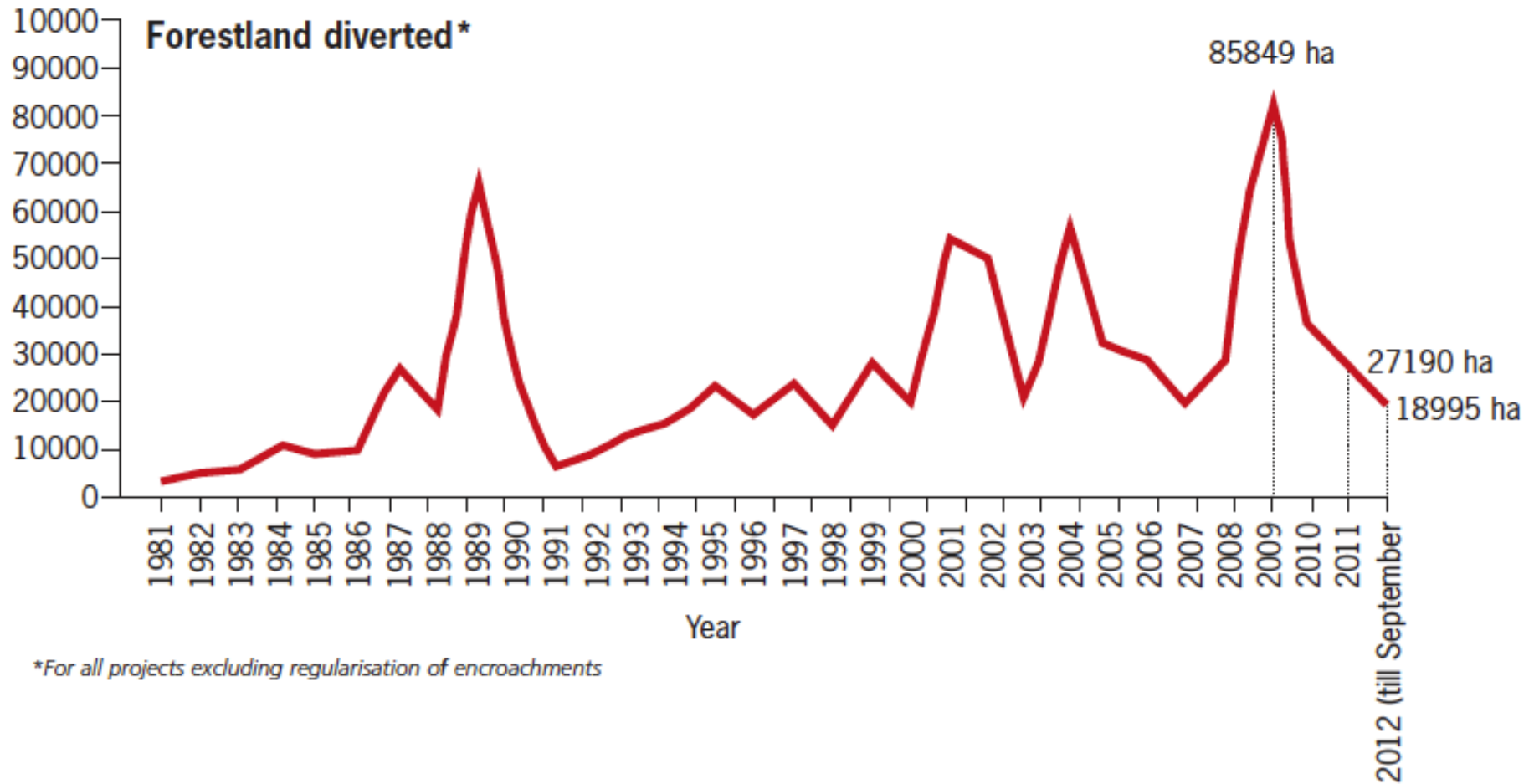
# Scale of forest clearance

---

- Unprecedented rate of clearance in the last five years (2007-2011; 11<sup>th</sup> FYP);
- 8,734 projects granted forest clearance and 1.98 lakh hectare (ha) of forest land diverted – 24.3 per cent of all forest land diverted for development projects since 1981. **Pace of forest land diversion doubled**
- In one single year – 2009 – as much as 85,849 ha of forest was granted clearances – **highest in any one year since 1981**
- The area diverted is equal to about four times the area of a Panna or a Sahyadri or a Tadoba tiger reserve



# Trend of forest land diverted: 1980- Sept. 2012



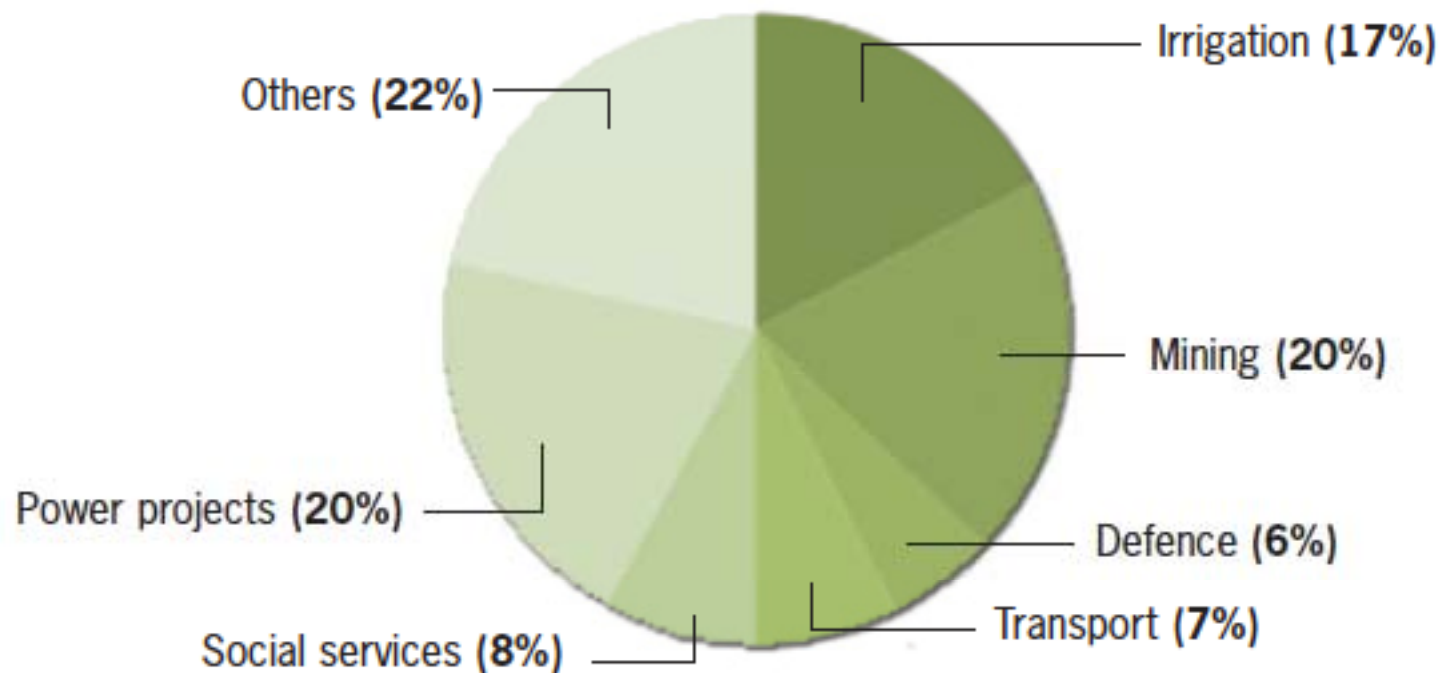
# Pace of forest land cleared in last few years unprecedented



Period/year	Forestland diverted (ha)
1981-1992	187,266.14
8th FYP (1992-97)	79,483.26
9th FYP (1997-2002)	141836.65
10th FYP (2002-2007)	190045.51
2007	20159.62
2008	27461.66
2009	85849.11
2010	37,247.46
2011	27,189.76
11th FYP (2007-2011)	197,907.61
2012 (till September)	18,995.31
<b>Total</b>	<b>815,534.48</b>

*\*For all projects excluding regularisation of encroachments*

# Forest clearances for what: 1980- Sept. 2012



## Forest clearances in 11<sup>th</sup> FYP

One-fourth of all forest diversion was for mining

	Forest area diverted (in ha)	Percentage of total forest diverted (%)
<b>Mining</b>	<b>48537.39</b>	<b>25</b>
<b>Irrigation</b>	<b>24270.73</b>	<b>12</b>
<b>Power projects Total</b>	<b>18629.73</b>	<b>10</b>
Hydel	5825	2.9
Thermal	2079	1.05
Wind	2554.35	1.29
Transmission lines	8171.25	6
Transport ( Roads, Railways)	23607.17	12
Social services	2560.81	1
Others (including industries)	67619.25	34
<b>Total area diverted</b>	<b>197908.07</b>	<b>100</b>

# Forest clearances for Coal mining: 11<sup>th</sup> FYP

---



- 119 coal mining project given FC – 70 final clearance + 49 in-principle.
- 31,500 ha forest land diverted – 16% of all forest land diversion
- More than all forest land diverted for all mining projects during 10<sup>th</sup> FYP (29,000 ha)

# Forest clearances for Coal mining: 11<sup>th</sup> FYP



State	Number of projects granted in-principle clearance	Number of projects granted final clearance	Total number of projects	Forestland diverted (in ha)
Andhra Pradesh	6	13	19	5139.82
Chhattisgarh	11	11	22	12120.687
Jharkhand	16	26	42	6949.2056
Madhya Pradesh	10	12	22	5599.21
Maharashtra	3	1	4	407.04
Orissa	2	7	9	1267.528
West Bengal	1	0	1	4.89
<b>Total</b>	<b>49</b>	<b>70</b>	<b>119</b>	<b>31488.38</b>

# Environment clearances for Coal mining: 11<sup>th</sup> FYP



- 184 coal mines given EC; the combined production capacity is at least 589 million tonnes per annum (MTPA).
- In 2011-12, India produced about 554 million tonnes coal.
- So, during 11<sup>th</sup> FYP, MoEF has granted EC to double the coal production capacity in the country.

# Environment clearances for Coal mining: 11<sup>th</sup> FYP



State	Number of coal mines granted EC	Capacity of coal mines granted EC (MTPA)
Andhra Pradesh	29	48.5
Assam	1	0.15
Chhattisgarh	21	102.9
Gujarat	1	0.3
Jharkhand	32	140.3
Maharashtra	33	44.4
Madhya Pradesh	36	137.8
Orissa	14	95.2
Rajasthan	4	5.5
Uttar Pradesh	1	4
West Bengal	12	9.9
<b>Total</b>	<b>184</b>	<b>588.8</b>



# Ministry of Coal agrees: Reply in response to our Sept. 2011 data



- 65 coal mining projects granted final forest clearances till Sept. 2011 (data on in-principle clearances not given) – ours was 67
- Difference in how much forest land diverted – our data 22,000 ha; theirs 12,190 ha
- 192 coal mining projects granted environment clearances with a total capacity of 389 million tonnes – ours 181 projects; 580 million tonnes
- **Why these mines are not being operationalised?**



# Thermal power plants

---

- 276 thermal power plants adding up to 2.2 lakh MW capacity granted environment clearances.
- Current thermal capacity is 1,38,806 MW.

## **Coal-thermal power plants:**

- 206 coal-based TPPs adding up to 1.82 lakh MW installed capacity granted environmental clearance.
- **Most TPPs don't require forest clearances**

# Other projects: granted environment clearance

---



During the 11<sup>th</sup> plan period (till March 2012)

- 112 cement plants; 202 million tonnes capacity;
- 203 steel plants; 132 million tonnes capacity
- 113 iron ore mines; 162 million tonnes/annum
- 110 limestone mines; 137 million tonnes/annum
- 29 bauxite mines; 21 million tonnes (only 13 million tonnes/annum produced currently)

**In all sectors clearances granted will double present capacity**



# NIB Proposal

---

- National Investment Board proposal says the following:
  - “Projects held up for investment on account of inordinate delay in getting statutory approvals”
  - “It may be necessary to redesign governmental decision making systems”
  - “Amend the business of transaction rules so that statutory clearances under various acts...are given by the Board”



## NIB: All in charge

---

- “In case the clearances are not given within a stipulated time period the Authority of the concerned ministry/department would stand transferred to NIB for decision”
- “The NIB will also consider representations from aggrieved parties whose application has been delayed/rejected”
- “Once the decision of NIB is notified by the secretariat it shall be binding on all ministries”



## NIB: delay against target

	Target	Achievement
Roads	48,479 kms.	Completed – 17,571 kms. Under implementation – 13,981 kms. To be awarded – 16,927 kms.
Additional power generation capacity created	78,700 MW	55,000 MW
Coal production (per annum)	680 million tonnes reduced to 630 million tonnes	540 million tonnes



## But is this correct?

---

In all cases, environment and forest clearances have been given beyond what is operational or even planned or targeted

Is NIB an excuse to destroy green regulatory system?



# Thermal power plants

---

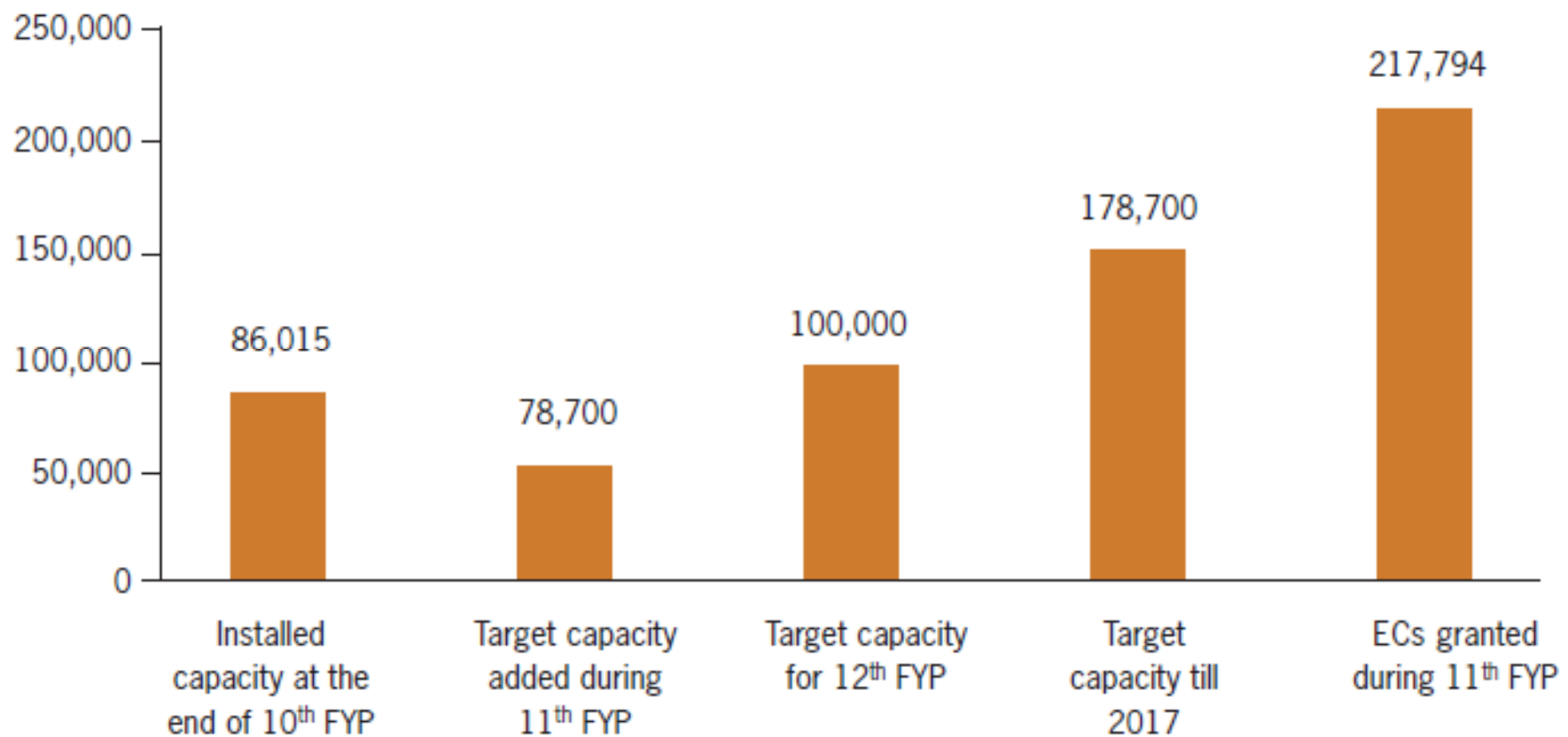
- The target for additional thermal power plant capacity during the 11th FYP: **78,700 MW**
- The target for the 12th FYP: **100,000 MW**
- During the 11th FYP TPP installed: **53,000 MW**  
– *about 26,000 MW less than the target.*
- **Why? Because of lack of environment and forest clearances?**



# Thermal power plants: Target vs. EC granted



**Figure 1:** Target vs environment clearance granted (capacity in MW)



# Is thermal held up because of coal?

---



- CIL produces 90% coal; **2 lakh ha** of mine lease area (including 50,000 ha of forests)
- CIL reserves are **64 billion** tonnes
- Why CIL only produces **435 million** tonnes annually?
- Forest clearances granted to 119 coal mines; environment clearance to 184 to produce **589 million** tonnes in addition

# Is thermal held up because of coal?



- 
- Database shows only 15 coal mining projects pending with MoEF
  - In comparison 119 cleared in addition
  - **Why then demand for more clearances?**
  - **Why shortages?**

# Environment clearances not working..

---



- .... **to protect the environment**
- Hardly any rejection of projects (0.1% in environment and 6% in forests)
- No consideration of cumulative impact of projects being cleared
- Huge devastation of environment; adverse health impact on people

# Top 10 thermal districts: living hell



## Top 10

Districts	Capacity of coal-based TPP (in MW)	Remark
Nellore	12260	Impact on marine ecology likely
Kutch	10195	Impact on marine ecology likely
Singrauli	10080	Critically polluted area
Cuddalore	8020	Critically polluted area
Nagpur-Chandrapur	7260	Critically polluted area
Janjgir-Champa	6043	Emerging coal-based power and steel industry hub
Angul	5734	Critically polluted area
Nagapattinam	5510	Fishing as the main occupation, the impact of sea discharge will be immense
Jharsuguda	5095	Critically polluted area
Korba	4220	Critically polluted area

# Cumulative impact: coal+ thermal and no CEPI



## Projects granted environment clearance during 11<sup>th</sup> FYP in critically polluted coalfields

District	Coal mining capacity (in MTPA)	Coal-based thermal power capacity (in MW)
Korba	77.64 +	4220
Angul-Talcher	72.17 +	5734
Hazaribagh-Chatra	97 (20% of India's current production)	4135
Singrauli	48.375 +	10080
Chandrapur	25.576 +	7260
Raigarh	19.2 +	4200
Jharsuguda	16.5 +	5095



# Green clearances need reform

---

1. Need to consolidate environment; forest, wildlife, coastal clearances so that project impact is fully understood and decisions taken. The fragmentation is adding to delays but also poor decision making
2. EIA should be comprehensive for all aspects – one impact assessment document for all clearances
3. Project should be tracked through one number so that all clearances are linked and impacts considered
4. All project documents in public domain – transparency for all

# EIA

---



1. To ensure that there are delays are reduced, the completeness and the correctness of the EIA is essential. Currently, project proponents do bad EIA documents; delays in constantly asking for information
2. If EIA is inadequate/ wrong; project must be rejected – **zero tolerance policy**
3. If EIA is wrong/ false then the EIA consultant must be black listed





# Cumulative EIA

---

- Must move towards cumulative EIA so that projects are cleared knowing carrying capacity
- All projects must be tracked in terms of district pollution load and river-basin impacts
- Cumulative EIA must be done by independent agency, paid through cess or other public funds and not by industry – ***NGT judgment asking industry to do this will destroy the environmental planning process***



# Appraisal committees

---

- These are faceless committees, with power to recommend and no responsibility to ensure that project will not damage environment
- They can set conditions – long list – but as they have no role in post-clearance monitoring these can be unfeasible or unnecessary. Not effective for project's integrity
- All committee members must be made accountable – bad appraisal must lead to consequences



# Pollution Control Boards

---

- Currently system is broken
- EIA clearance by MoEF/ SEIAA and monitoring by Regional Offices
- Water and Air clearances by SPCBs through Consent to Establish and periodic NOC
- No link between the two
- Cannot work. Need to integrate
- Clearances with MoEF
- Monitoring with Pollution Boards
- All information publicly available; Clearance Committees responsible for bad decisions



# Data and transparency

---

- MoEF must deepen the process of public assessment and scrutiny of all projects
- Put all data out in public domain
- **Strengthen the public hearing process. All** filming made available on a real-time basis through streaming on the Internet
- Set-up systems for community monitoring and periodic reporting on the clearance conditions

# Reject NIB; reform statutory clearances

---



- We cannot dismantle and dismember green clearances
- These statutory regulations are critical for environmental integrity
- But we need urgent strengthening of the system
- It must work for the environment and for people