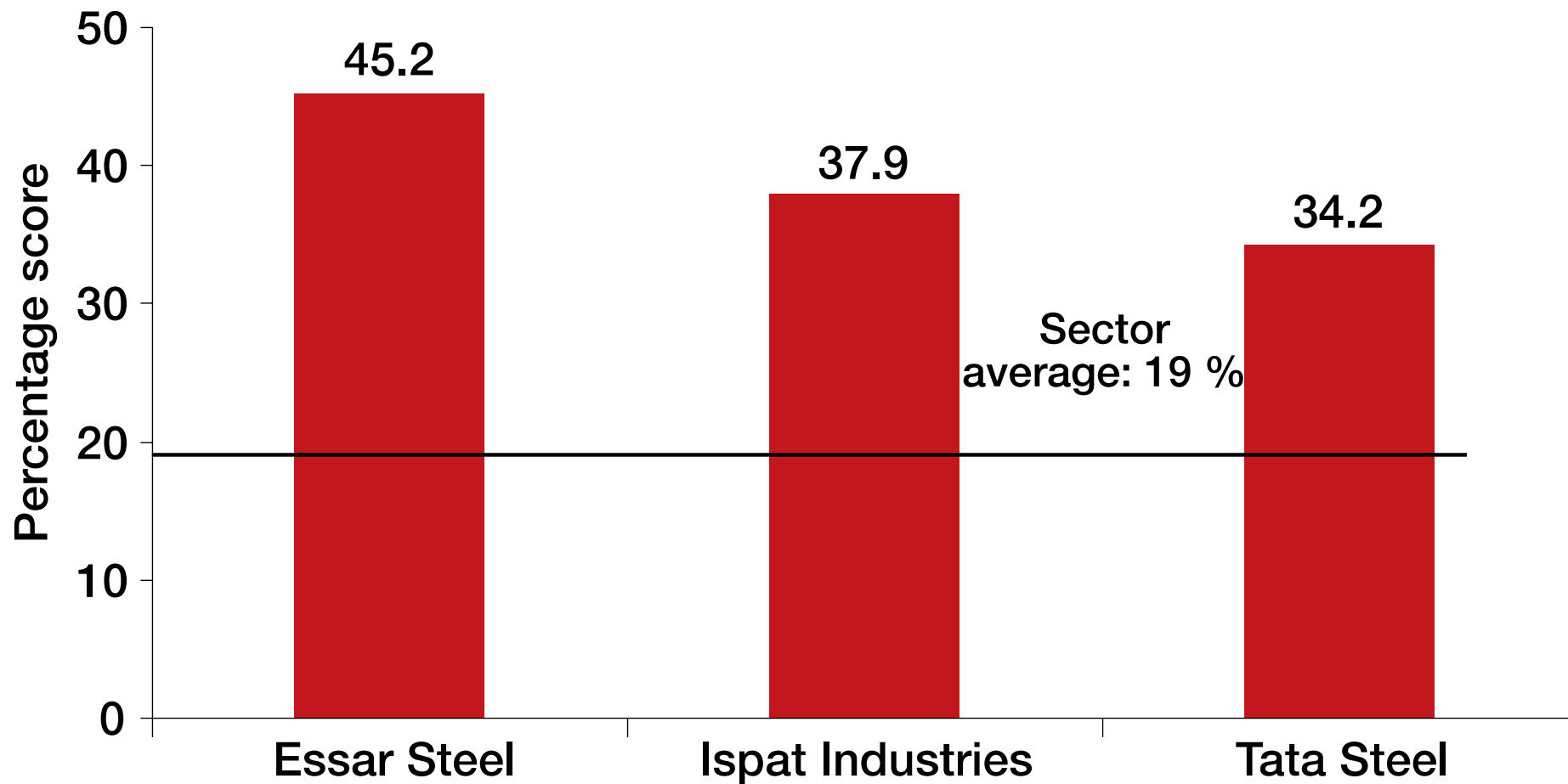




The Report Card

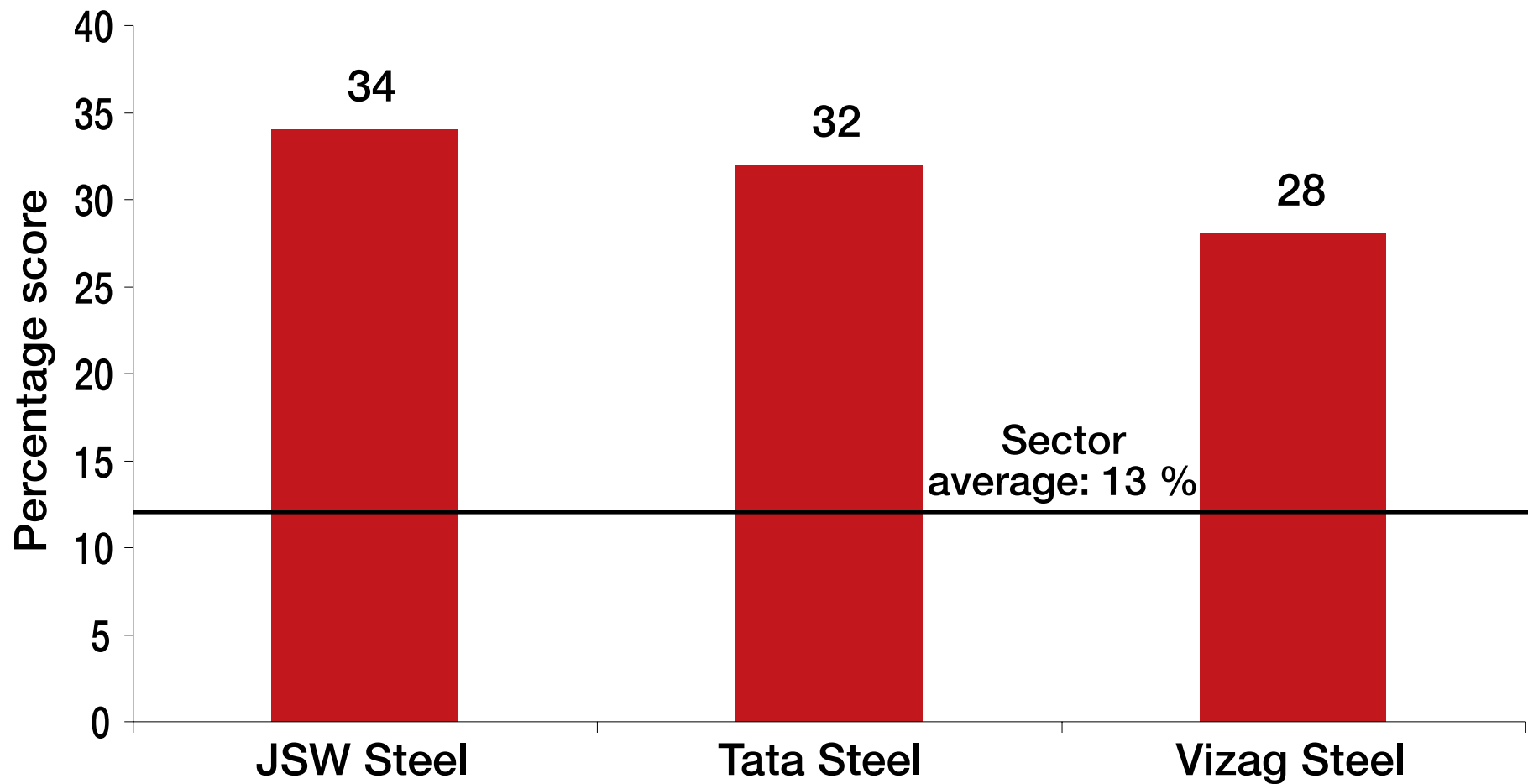


Iron making



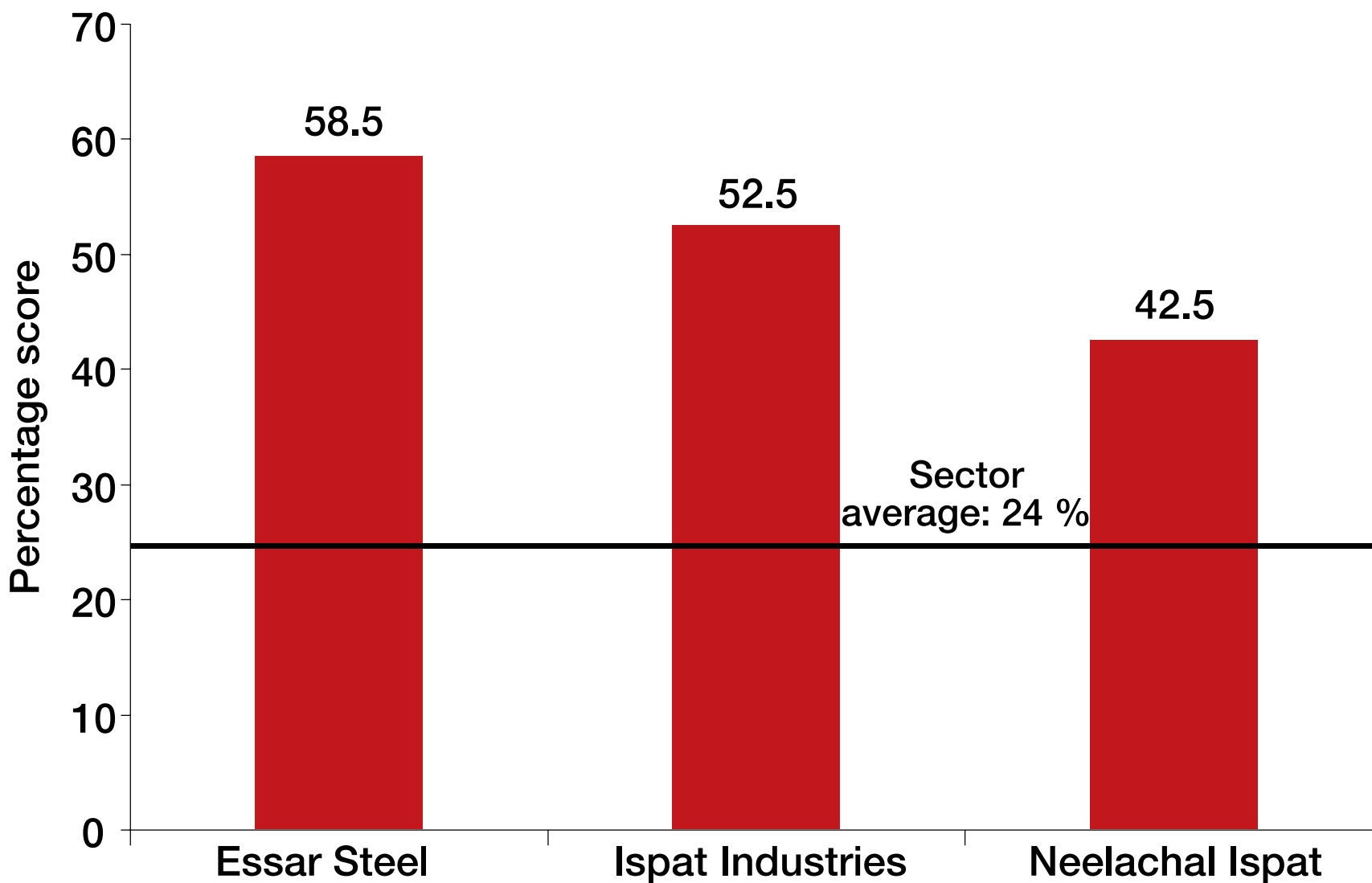


Steel making



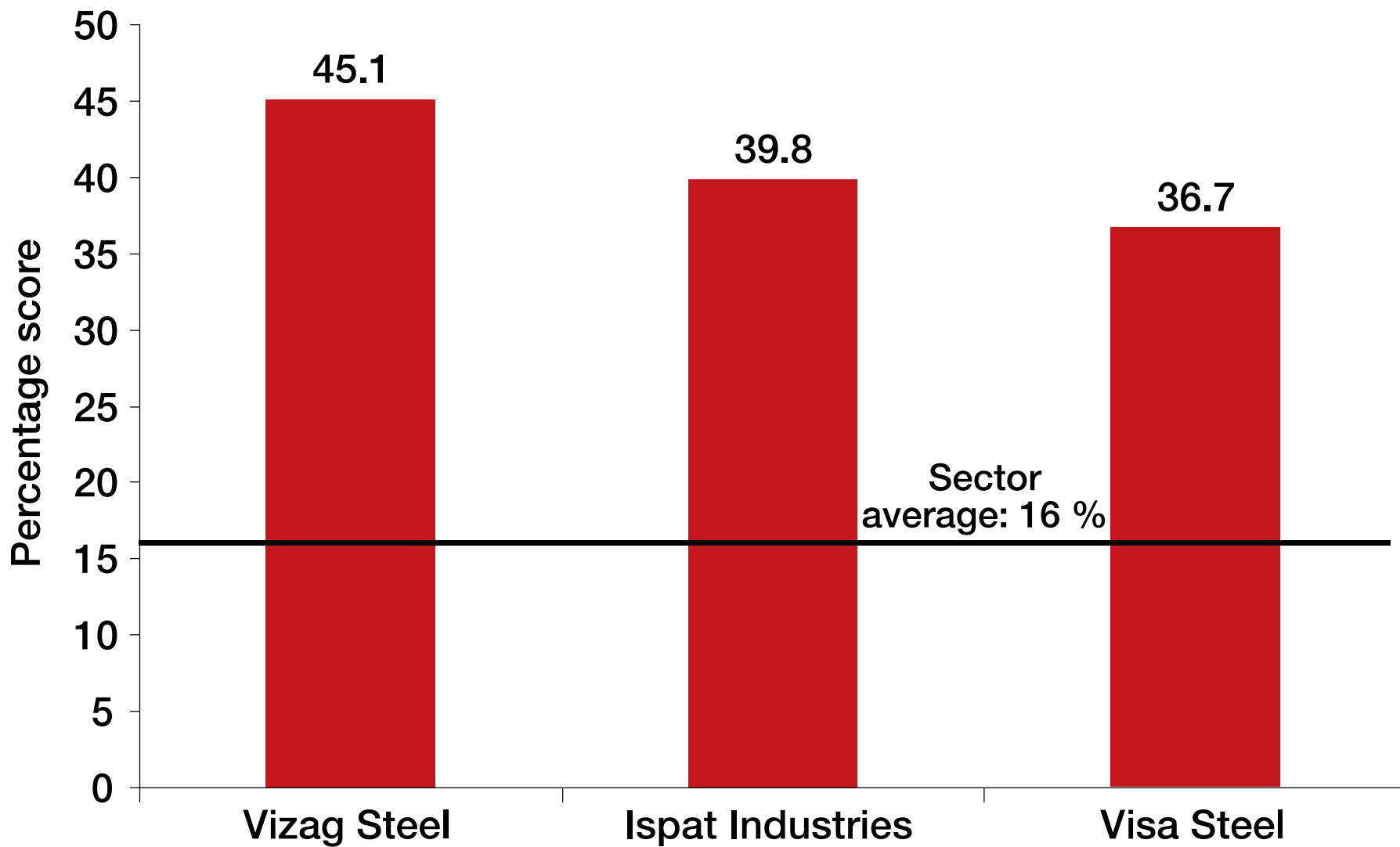


Resource efficiency



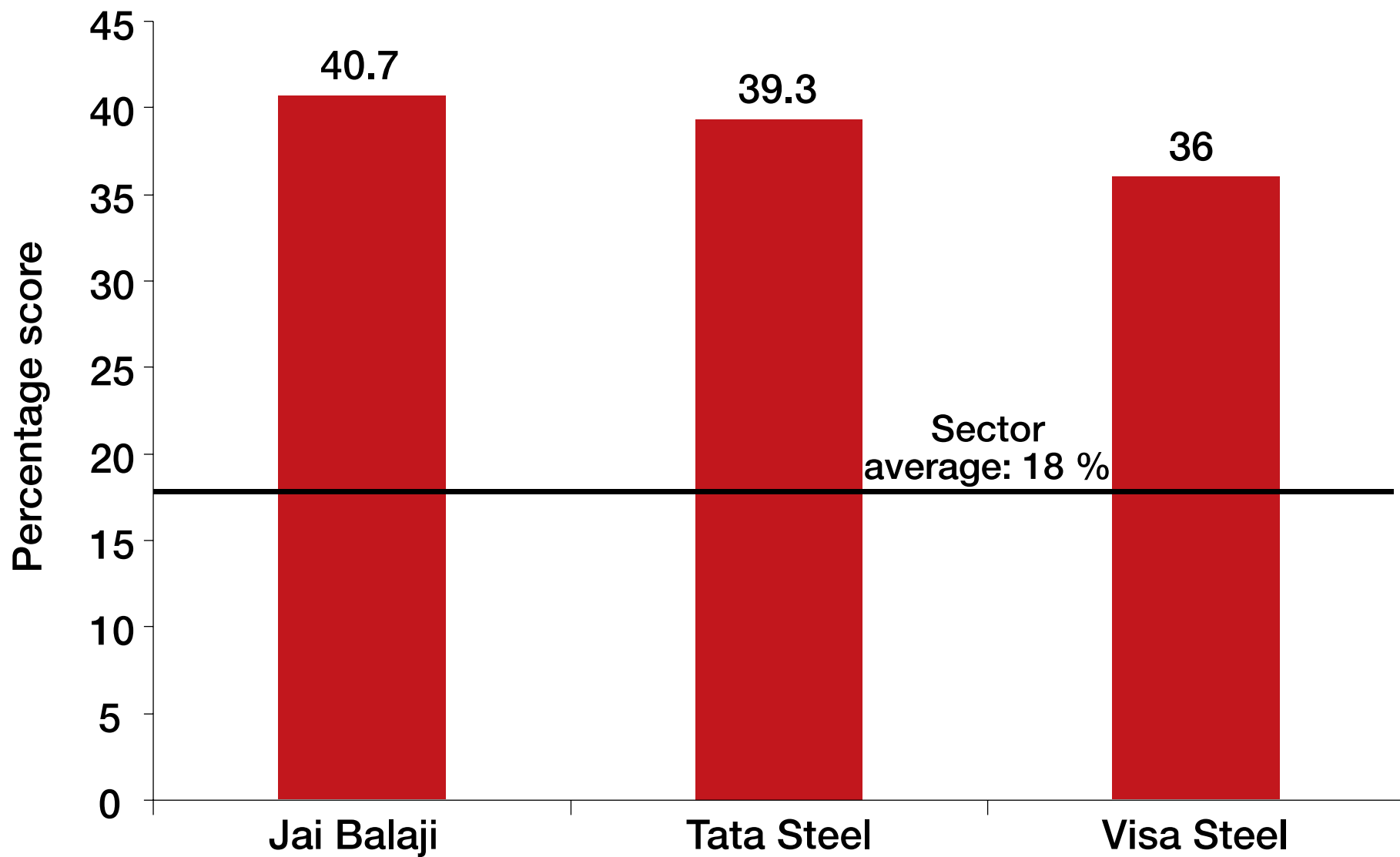


Overall pollution



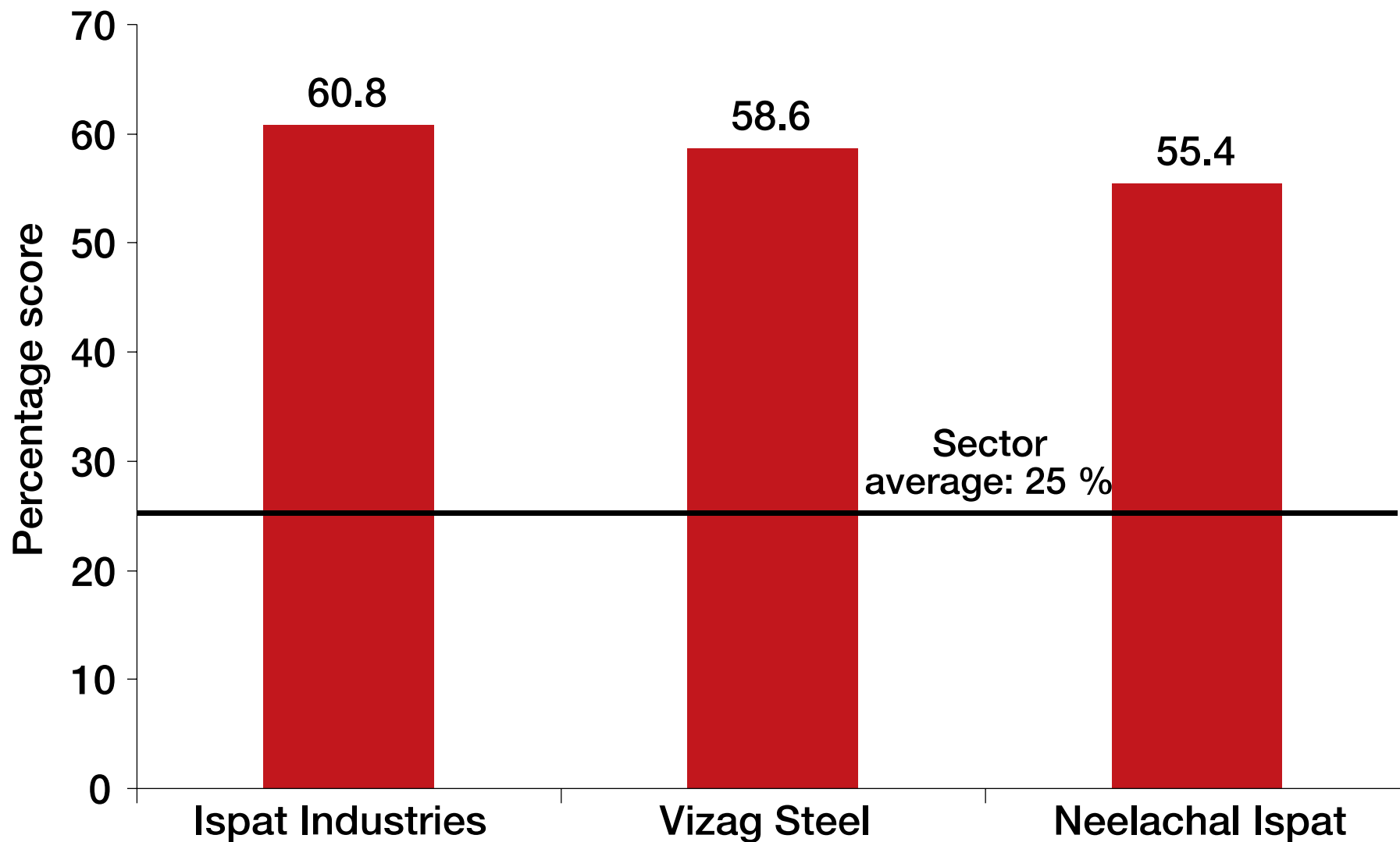


Environment, Health & Safety





Stakeholders & transparency





The Final Score












Neelachal Ispat Nigam Limited, Kalinganagar, Odisha	33	
Tata Steel Limited, Jamshedpur, Jharkhand	32	
JSW Steel, Vijaynagar, Bellary, Karnataka	27	
Visa Steel Limited, Kalinganagar, Odisha	26	
Godawari Power and Ispat Limited, Siltara, Raipur, Chhattisgarh	26	
Chhattisgarh and Power Limited, Raigarh, Chhattisgarh	24	
Jai Balaji Industries Limited, Banskopa, Durgapur, West Bengal	23	
SAIL Rourkela, Odisha	21	
Bhushan Power and Steel Limited, Sambalpur, Odisha	20	
Usha Martin Limited, Jamshedpur, Jharkhand	15	
Welspun Maxsteel Limited, Raigad, Maharashtra	9	
SAIL Bhilai, Chhattisgarh	9	
SAIL Durgapur, West Bengal	7	
SAIL Bokaro, Jharkhand	7	
Jayaswal Neco Industries Limited, Siltara, Raipur, Chhattisgarh	4	
SAIL IISCO, Burnpur, West Bengal	3	
Monnet Ispat and Energy Limited, Raigarh, Chhattisgarh	3	
Bhushan Steel Limited, Dhenkanal, Odisha	2	



The Top 3: How good or bad they are



The Report Card

Vizag Steel, Visakhapatnam, Andhra Pradesh	36	
Neelachal Ispat Nigam Limited, Kalinganagar, Odisha	33	
Tata Steel Limited, Jamshedpur, Jharkhand	32	
JSW Steel, Vijaynagar, Bellary, Karnataka	27	
Visa Steel Limited, Kalinganagar, Odisha	26	
Godawari Power and Ispat Limited, Siltara, Raipur, Chhattisgarh	26	
Uda Steel and Power Limited, Raigarh, Chhattisgarh	24	
Jai Balaji Industries Limited, Banskopa, Durgapur, West Bengal	23	
SAIL Rourkela, Odisha	21	
Bhushan Power and Steel Limited, Sambalpur, Odisha	20	
Usha Martin Limited, Jamshedpur, Jharkhand	15	
Welspun Maxsteel Limited, Raigad, Maharashtra	9	
SAIL Bhilai, Chhattisgarh	9	
SAIL Durgapur, West Bengal	7	
SAIL Bokaro, Jharkhand	7	
Jayaswal Neco Industries Limited, Siltara, Raipur, Chhattisgarh	4	
SAIL IISCO, Burnpur, West Bengal	3	
Monnet Ispat and Energy Limited, Raigarh, Chhattisgarh	3	
Bhushan Steel Limited, Dhenkanal, Odisha	2	



Vizag Steel, Visakhapatnam

- Specific **primary energy** consumption is high 6.6 Gcal/tcs – similar to the sector average
- Specific process **water consumption**: 3.5 m³/tcs – among the lowest for BF-BOF plant
- **Land**: About 3000 ha/million tonne capacity – one of the most land inefficient plants
- **GHG emissions**: 2.9 tonnes/tcs – 70% higher than global best practice
- **Solid waste disposal**: 0.24 tonnes/tcs -- among the lowest for BF-BOF plant. Rated highly on hazardous waste management
- **Wastewater discharge**: Non-compliant



Vizag Steel, Visakhapatnam

- One of the very few plants that is able to meet air quality norms
- Environment management system needs improvements and occupational health and safety unsatisfactory
- Local community gave high rating to the plant but issue of **water pollution and R&R pending**
- Rated high on transparency and disclosure by GRP



Vizag Steel, Visakhapatnam

Performance area	Score (%)	Rating
Iron making	31	2 leaves
Steel making	28	2 leaves
Raw material handling	28	2 leaves
Resource use efficiency	36	3 leaves
Overall pollution	45	3 leaves
Safety, environment management	18	1 leaf
Stakeholders' perception	59	4 leaves
Overall performance	36	3 leaves



The Report Card

Essar Steel, Hazira, Gujarat	39	
Vizag Steel, Visakhapatnam, Andhra Pradesh	36	
Neelachal Ispat Nigam Limited, Kalinganagar, Odisha	33	
Tata Steel Limited, Jamshedpur, Jharkhand	32	
JSW Steel, Vijaynagar, Bellary, Karnataka	27	
Visa Steel Limited, Kalinganagar, Odisha	26	
Godawari Power and Ispat Limited, Siltara, Raipur, Chhattisgarh	26	
Chhattisgarh and Power Limited, Raigarh, Chhattisgarh	24	
Jai Balaji Industries Limited, Banskopa, Durgapur, West Bengal	23	
SAIL Rourkela, Odisha	21	
Bhushan Power and Steel Limited, Sambalpur, Odisha	20	
Usha Martin Limited, Jamshedpur, Jharkhand	15	
Welspun Maxsteel Limited, Raigad, Maharashtra	9	
SAIL Bhilai, Chhattisgarh	9	
SAIL Durgapur, West Bengal	7	
SAIL Bokaro, Jharkhand	7	
Jayaswal Neco Industries Limited, Siltara, Raipur, Chhattisgarh	4	
SAIL IISCO, Burnpur, West Bengal	3	
Monnet Ispat and Energy Limited, Raigarh, Chhattisgarh	3	
Bhushan Steel Limited, Dhenkanal, Odisha	2	



Essar Steel, Hazira

- Gas –based DRI-EAF plant
- Specific primary energy consumption: 5.5 Gcal/tcs -- the second lowest in India
- Specific process water consumption: 2.7 m³/tcs – high considering its gas-based process
- Land: 65 ha/million tonne capacity – the most land-efficient plant
- GHG emissions: 1.4 tonnes/tcs – near the global best for similar plant design
- Solid waste disposal: 0.27 tonnes/tcs -- high
- Wastewater discharge: meeting the norms – but should be a zero discharge plant



Essar Steel, Hazira

- **High fugitive emissions from material handling and storage**
- **Violation of CRZ regulations**
- **Environment management system was found adequate but occupational safety unsatisfactory**
- **Local community gave an average rating to the plant – complaints of dust pollution and livelihood impacts**
- **Rated average on transparency and disclosure by GRP**



Essar Steel, Hazira

Performance area	Score (%)	Rating
Iron making	45	3 leaves
Steel making	27	2 leaves
Raw material handling	37	3 leaves
Resource use efficiency	58	4 leaves
Overall pollution	33	2 leaves
Safety, environment management	26	2 leaves
Stakeholders' perception	40	3 leaves
Overall performance	39	3 leaves



The Report Card

Ispat Industries, Dolvi, Raigad, Maharashtra	40	
Essar Steel, Hazira, Gujarat	39	
Vizag Steel, Visakhapatnam, Andhra Pradesh	36	
Neelachal Ispat Nigam Limited, Kalinganagar, Odisha	33	
Tata Steel Limited, Jamshedpur, Jharkhand	32	
JSW Steel, Vijaynagar, Bellary, Karnataka	27	
Visa Steel Limited, Kalinganagar, Odisha	26	
Godawari Power and Ispat Limited, Siltara, Raipur, Chhattisgarh	26	
Uda Steel and Power Limited, Raigarh, Chhattisgarh	24	
Jai Balaji Industries Limited, Banskopa, Durgapur, West Bengal	23	
SAIL Rourkela, Odisha	21	
Bhushan Power and Steel Limited, Sambalpur, Odisha	20	
Usha Martin Limited, Jamshedpur, Jharkhand	15	
Welspun Maxsteel Limited, Raigad, Maharashtra	9	
SAIL Bhilai, Chhattisgarh	9	
SAIL Durgapur, West Bengal	7	
SAIL Bokaro, Jharkhand	7	
Jayaswal Neco Industries Limited, Siltara, Raipur, Chhattisgarh	4	
SAIL IISCO, Burnpur, West Bengal	3	
Monnet Ispat and Energy Limited, Raigarh, Chhattisgarh	3	
Bhushan Steel Limited, Dhenkanal, Odisha	2	



Ispat Industries, Raigad

- Specific primary energy consumption: 5.4 Gcal/tcs -- the most energy-efficient steel producer – 20% above best practice
- Specific process water consumption: 2.1 m³/tcs – lowest in the country – double the global best practice
- Land: 140 ha/million tonne capacity
- GHG emissions: 2.0 tonnes/tcs – 40% higher than best practice
- Solid waste disposal: 0.23 tonnes/tcs – one of the lowest but double the global best practice
- Wastewater discharge: Almost zero discharge plant



Ispat Industries, Raigad

- **Air pollution -- found non-compliant with ambient and stack emission norms**
- **Occupational safety is an area of concern**
- **Though local stakeholders had favorable opinion, dust pollution and impact on fisheries due to transportation by ships and barges were raised as concerns**
- **Rated highly on transparency and disclosure**



Ispat Industries, Raigad

Performance area	Score (%)	Rating
Iron making	38	3 leaves
Steel making	26	2 leaves
Raw material handling	12	No leaf
Resource use efficiency	52	4 leaves
Overall pollution	40	3 leaves
Safety, environment management	34	2 leaves
Stakeholders' perception	61	4 leaves
Overall performance	40	3 leaves