

1                   **A paradox view on Green Human Resource Management:**  
2                                   **Insights from the Italian context**

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6

7                                   **Abstract**

8 Paradox – understood as a set of contradictory and incompatible poles all supported by apparently  
9 sound arguments – is considered to be a key element in modern organizations. As a result, paradox  
10 scholars argue that successful managers are those able to accept the tensions arising from the paradox  
11 and able to pursue all its constitutive poles simultaneously instead of choosing only one of them.  
12 Paradox theory has been recently applied to corporate sustainability, and it is a theoretical approach  
13 that has been endorsed by influential authors also in the HRM field. In this context, this paper takes  
14 the still unexplored opportunity to apply paradox theory to green HRM. In particular, it explores the  
15 HRM-related paradoxes perceived by organizations developing environmental sustainability via  
16 human resource management. Adopting a comparative multiple case study approach, semi-  
17 structured interviews and document analysis were conducted in six Italian companies explicitly  
18 pursuing an environmental strategy. The findings encompass the main characteristics of the green  
19 HRM systems of the organizations analyzed, and a list is provided of eight HRM-related paradoxes  
20 perceived by those organizations. For each paradox, we present and discuss its contrasting poles and  
21 the components of the HRM system that it affects. The implications of the findings for both green  
22 HRM research and practice are presented and discussed.

23                                   **Key Words**

24                   *paradox, environmental sustainability, green HRM, sustainable HRM*  
25

## 1. INTRODUCTION

26  
27  
28 In recent years, the concept of sustainable HRM, defined as people-management practices that take  
29 the development of social, environmental and human capital into account, has emerged in contrast  
30 to strategic HRM, which is mostly focused on achieving economic goals and maximizing  
31 profitability (Ehnert 2009; Kramar 2013). Within the broad field of sustainable HRM, a growing  
32 stream of studies explores the relation between a set of specific HRM practices (called ‘green HRM’)  
33 and environmental sustainability. Indeed, developing employees’ commitment to, and involvement  
34 in, green objectives has been found to be a key factor in realizing environmentally sustainable  
35 organizations (e.g. Renwick et al. 2013).

36 Notwithstanding the recent developments in the field, the present paper is based on the assumption  
37 that both green HRM research and practice have not yet explored the potential benefits arising from  
38 the adoption of paradox theory. Paradox theory – which conceives paradox as a set of two or more  
39 contradictory, incompatible and interrelated poles (Poole and Van de Ven 1989) – has been applied  
40 by a growing number of contributions recently published by highly reputed organization studies  
41 journals (e.g. Dameron and Torset 2014 on identity construction; Michaud 2014, on organizational  
42 governance; Putnam et al. 2014, on flexible work arrangements; Kozica et al. 2015, on organizational  
43 identity). Indeed, organization theorists view paradoxes as constitutive elements of modern  
44 organizations, and they assume that the coexistence of their multiple poles generates tensions which  
45 – depending on the coping strategies adopted by the organization – give rise to vicious or virtuous  
46 cycles (Lewis, 2000). Vicious cycles emerge when organizations focus on one single pole following  
47 an ‘either/or’ approach; these cycles are said to exacerbate tensions and are associated with missing  
48 alternative perspectives and organizational inertia (Smith and Lewis 2011). By contrast, virtuous

49 cycles emerge when organizations develop an awareness of paradoxical tensions and choose all poles  
50 of the paradox following a ‘both/and’ approach, even if this may be perceived as counterintuitive or  
51 unrealistic. The benefits of virtuous cycles range from fostering radical and incremental innovation  
52 (e.g. Andriopoulos and Lewis 2009) to ensuring organization survival in the long run (e.g. Probst  
53 and Raisch 2005; Handy 1994).

54 In the HRM field, paradox theory seems to be a perspective that has characterized the work of such  
55 influential scholars as Karen Legge and Paul Evans, although it is not yet fully recognized by extant  
56 HRM research. This is because, in mainstream HRM research, paradoxical tensions have been  
57 mostly considered from a ‘fit’ perspective which assumes that they can and should be ‘solved’,  
58 instead of acknowledging the intrinsically contradictory nature of HRM activities (Legge 1978;  
59 Evans 1999; Boselie et al. 2009; Sheehan et al. 2013).

60 In regard to corporate sustainability studies, scholars have applied paradox theory in order to  
61 understand and improve sustainability-oriented practices by considering the multiple tensions that  
62 the concept – which comprises different dimensions and traverses different levels of analysis – brings  
63 to organizations and business leaders (Hahn et al. 2014a and b; Gao and Bansal 2013).

64 Although it has been recently argued that paradox is a fundamental lens through which to theorize  
65 sustainable HRM (Ehnert 2009, 2014), it seems that green HRM has not yet taken the opportunity  
66 to apply paradox theory, given that the field is heavily concentrated on content and design issues  
67 (Jackson 2012). Consequently, here we adopt a paradox theory to explore the paradoxical tensions  
68 that arise in the HRM area when companies decide to pursue environmental sustainability goals. In  
69 particular, the aim of this explorative article is to contribute to green HRM theory and practice by  
70 extending knowledge and comprehension of the HRM-related paradoxes that affect companies  
71 developing environmental sustainability via HRM.

72 This knowledge extension represents an opportunity for green HRM practice. The previous literature  
73 has highlighted several possible strategies for coping with paradoxes (Lewis 2000). What is relevant  
74 here, however, is that two of these strategies are not considered to be constructive: ‘ignorance’, i.e.  
75 not considering one pole of a paradox; and ‘denial’, i.e. assuming the two poles to be complementary  
76 instead of contradictory. These strategies are critical because they deny the existence of tensions and  
77 inhibit the learning opportunities generated by the emergence of paradoxes; “staying with the  
78 paradox” (Vince and Broussine 1996: 4) is indeed considered a key ability for the ‘modern manager’  
79 (Poole and Van de Ven 1989) and the emerging tensions may give rise to change and innovation by  
80 “challenging actors’ cognitive limits, demanding creative sense-making, and seeking more fluid,  
81 reflexive, and sustainable management strategies” (Smith and Lewis 2011: 395).

82 In accordance with these authors, we believe that the list of paradoxes identified in this paper will  
83 help practitioners working on green HRM systems to detect paradoxes and develop a constructive  
84 coping strategy, and also to make more informed design choices as they recognize the potential  
85 downsides of their interventions. In parallel, the aim of the study is to contribute to the green HRM  
86 literature, since our findings – in line with those of other contributions to organization studies –  
87 support the idea that paradoxes are not sporadic accidents, but recurrent elements which affect the  
88 components of the green HRM system. This study is thus an attempt to conduct critical re-evaluation  
89 of the concept of ‘fit’ and to call for a more sophisticated approach to HRM-related tensions that  
90 takes account of the complexity, ambiguity and diversity that characterize contemporary  
91 organizations.

92 In pursuit of these objectives, the paper is organized as follows. The next section outlines the  
93 theoretical framework, presenting how and why paradox theory has been adopted to understand  
94 corporate sustainability and HRM. This leads to formulation of the study’s research objective and  
95 questions. Then, the method section describes the various phases of the empirical research process

96 and all the related techniques, while the findings section presents the results of the study. In the last  
97 three sections, we contextualize the research results in extant research, consider their implications  
98 for green HRM practice, and discuss their limitations and possible future developments.

99

## 100 **2. THEORETICAL BACKGROUND**

101

102 The aim of this section is to explain why paradox theory is useful for analyzing environmental  
103 sustainability in general and green HRM in particular, and to present the research questions  
104 addressed in our research. Accordingly, we organize this section into three parts: in the first we show  
105 the intrinsically paradoxical nature of sustainability in organizations; we then illustrate and discuss  
106 the application of a paradox approach in analysis of green HRM; we finally present the research  
107 objective and questions of the present study.

108

### 109 **2.1 The paradoxes of sustainability in organizations**

110 There are diverse definitions of the term ‘paradox’ in the management literature. Here we adopt the  
111 one proposed by Poole and Van de Ven (1989: 563): “paradox consists of two contrary or even  
112 contradictory propositions to which we are led by apparently sound arguments. Taken singly, each  
113 proposition is incontestable, but taken together they seem to be inconsistent or incompatible”. The  
114 pervasiveness of paradoxes is said to be related to tensions perceived by organizational actors (Lewis  
115 2000). This concept has several applications in organization studies, and it has attracted substantial  
116 attention in the top-tier journals (e.g. Warner 2009; Smith and Lewis 2011; Yoon and Chae 2012).  
117 Today, it is considered to be a key theoretical lens through which to study organizations (for instance,  
118 in 2013, *Organization Studies* called for papers on the paradoxes of organizational change and

119 innovation). Indeed, paradox is seen as a core theme of post-modern organizational design (Child  
120 and McGrath 2001). The basic assumption is that dealing with paradoxes enables organizations to  
121 improve the efficiency of existing products and to promote radical and incremental innovation for  
122 future viability (Lewis 2000; Andriopoulos and Lewis 2009; Jansen et al. 2012). The literature  
123 shows that companies able to manage mutually exclusive, but at the same time desirable, elements  
124 are the ones most successful in the long term (Cameron 1986; Probst and Raisch 2005). Similarly,  
125 the inability to deal with opposing forces is said to lead companies to failure (Handy 1994).

126 In the context of sustainability studies, corporate sustainability has been recognized as intrinsically  
127 paradoxical because it brings tensions into organizations (Gao and Bansal 2013). In this regard, a  
128 recent paper (Hahn et al. 2014a) identified four key sustainability-related paradoxes based on the  
129 following contrapositions: (i) personal versus organizational sustainability agendas, which refers to  
130 the broader paradox between individual agency and organizational structure (Barley and Tolbert,  
131 1997); (ii) short-term orientation of the company's financial objectives versus long-run societal  
132 expectations regarding environmental protection and social security (Held 2001); (iii) the need for  
133 firm-specific organizational responses to stakeholders' pressures versus the institutionalization of  
134 practices, which may affect sustainability-driven change with the risk of losing institutional  
135 legitimacy (Midttun 2007); (iv) isomorphic pressure towards organizational efficiency versus a  
136 societal need for diversity that fosters the resilience of social and organizational systems (Schutz,  
137 1999).

138 According to paradox theory, those four paradoxes may be sources of learning and innovation when  
139 organizations are able to live with the two poles of each paradox. Indeed, the suppression of one pole  
140 of a paradox fuels vicious cycles because the focus on only one pole resurfaces the need for the other  
141 (Lewis 2000). This inhibits the creative energy embedded in the tension (Sundaramurthy and Lewis  
142 2003), so that organizational actors are paralyzed when they try to choose between the two poles

143 (Smith and Berg 1987).By contrast, developing constructive strategies is said to enable  
144 organizational actors to manage those paradoxes by conceiving them as potential sources of  
145 innovation and learning. For example, Kolk and Perego (2014) demonstrate how recognition and  
146 acceptance of the tension between financial (short-term) versus social and environmental (long-term)  
147 objectives leads companies to adjust variable pay systems to include both long- and short-term  
148 concerns. This encourages managers to actively learn new competencies and creatively think about  
149 new and more sustainable ways to do things.

150 Although the paradoxes reported by Hahn and colleagues (2014a) have been conceived in relation  
151 to the broad concept of corporate sustainability (including the economic, social and environmental  
152 dimensions), a paradox framework can also be applied to gain deeper understanding of  
153 environmental sustainability *per se*. In light of the four above-mentioned paradoxes, we argue that  
154 companies pursuing environmental policies experience paradoxical tensions, for example related to:  
155 (i) the existence within the organization of different views on how and to what extent environmental  
156 sustainability should be incorporated in business processes; the propensity of organizational  
157 members to address environmental issues may be constrained by organizational practices, or the  
158 organization's commitment to environmental sustainability may be not welcomed by organizational  
159 actors (e.g. Bansal 2003; Pearce and Doh 2005); (ii) the difficulty of balancing environmental  
160 objectives with business and social ones, for example regarding the issue of climate change, in regard  
161 to which previous literature has demonstrated that its 'translation' into financial metrics (such as  
162 carbon costs) by many companies narrows down the set of potential solutions and shortens the time-  
163 horizon (Slawinski and Bansal 2012); (iii) the contraposition between the need to pursue radical  
164 innovation and at the same time to preserve institutional legitimacy, as in the case of electric vehicles,  
165 which, even if they represent a technological breakthrough, are still not common because they  
166 challenge the expectations and consumption patterns of specialized media and car-users (Bakker et

167 al. 2012); (iv) the implementation of ‘standard’ green practices considered efficient by most of the  
168 stakeholders versus firm-specific practices that foster diversity – as in the agricultural industry,  
169 where many farmers implement similar green practices selecting the same crops, and thereby reduce  
170 biodiversity and increase the social system’s level of resilience (Figge, 2004).

171 These tensions, together with decision-making under severe uncertainty and dealing with the lack of  
172 information, bring a complexity into organizations oriented towards environmental sustainability  
173 (Margolis et al. 2007; Matos and Hall 2007) that can be analytically understood more deeply by  
174 adopting paradox theory (Ehnert 2009, 2014; Hahn et al. 2014b). At the same time, the practical  
175 management of those tensions can be more effective when they are addressed within a paradox  
176 frame. Regarding the first of the paradoxes discussed above, for example, organizations that ignore  
177 or deny the contrast between individual versus organizational agendas in relation to environmental  
178 sustainability experience high levels of conflict which may lead to poor HRM outcomes such as high  
179 turnover or absenteeism or low workforce engagement. By contrast, as paradox theory maintains,  
180 organizations that recognize this contraposition can manage it successfully by creating opportunities  
181 for members to pursue their personal agendas (such as volunteering programs or green teams), or by  
182 establishing formal procedures that enable organizational members to integrate their personal  
183 agendas into the strategy-making process of the green organizational agenda. These initiatives –  
184 even if they are not designed to eliminate the individuals/organization conflict – give rise to higher  
185 satisfaction and motivation (Muthuri et al. 2009), as well as greater commitment to the organization’s  
186 sustainability agenda (Andersson and Bateman 2000; Markusson 2010).

187 On recognizing the analytical and practical value of the application of paradox theory to  
188 environmental sustainability, researchers in several disciplines have empirically analyzed the  
189 paradoxes that environmental sustainability causes in organizations (see Kleindorfer et al. 2005 and  
190 Wu and Pagell 2011 as examples of studies on the topic respectively pertaining to the disciplines



191 of logistics and supply chain management). To our knowledge, studies that address this topic in  
192 HRM are still lacking. Given that environmental sustainability has proved to be an issue difficult  
193 to manage in organizations, and that other managerial disciplines have applied paradox theory to  
194 study it, we intend to extend the application of this theoretical framework to green HRM research  
195 and practice. Consequently, we devote the next section to the development and discussion of a  
196 paradox frame in which to analyze green HRM.

197

## 198 **2.2 Applying paradox theory to green HRM research and practice**

199 Paradox theory is present in, and has characterized the work of, influential researchers also in the  
200 HRM research field, although not many scholars have formally referred to it. The seminal work by  
201 Legge (1978), for instance, outlines ambiguities in the role of HR managers that make HRM an  
202 intrinsically paradoxical field. In the 1990s, Evans (1999) extended this idea by contending that  
203 ambiguities are the reaction of individuals to paradoxes and dilemmas. He concluded that “ambiguity  
204 is the reactive face of the HRM subject to the oppositions of duality” (p. 333). Evans consequently  
205 introduced “duality/dilemma/paradox theory”, which assumes that complex organizations face  
206 opposing forces that need to be balanced dynamically. More recently, Boselie and colleagues (2009)  
207 have listed twenty paradoxes intrinsic to HRM, including HRM vs. personnel management, HRM  
208 vs. industrial relation, and ‘soft’ HRM vs. ‘hard’ HRM. Furthermore, the paradoxical view of HRM  
209 has been supported by Sheehan and colleagues (2013), who showed how the role of HR managers  
210 has inherent paradoxical tensions.

211 The application of paradox theory in HRM research has provided a more problematic view of  
212 specific issues, and it has helped HRM practice to move away from oversimplified solutions. For  
213 example, in a recent paper Putnam and colleagues (2014) have applied paradox theory to study

214 workplace flexibility. They find that organizations able to conceive (and accept) the tensions arising  
215 from work and life – understood as two contradictory poles of a paradox – are more likely to satisfy  
216 the work and non-work needs of employees. On the basis of this finding, the authors provide HRM  
217 practice with in-depth recommendations on how to effectively design and support workplace  
218 flexibility interventions in organizations.

219 Despite the analytical and practical contributions of paradox theory, however, this theoretical  
220 approach has attracted only a few researchers in HRM. One possible explanation is that recent HRM  
221 research has mostly endorsed contingency theory, under-representing the need to consider paradoxes  
222 as constitutive components of modern organizations and HRM processes. Indeed, apart from some  
223 exceptions which have highlighted the need to develop dynamic configurations (Paauwe et al. 2013),  
224 the recurrent focus on fit – which can be traced back to the Harvard “map of HRM territory” (Beer  
225 et al. 1984) – assumes that paradoxes and tensions can and should be ‘resolved’. By contrast, the  
226 research studies reported here assume not only that tensions cannot be resolved by design (Evans  
227 1999) but that they also are sources of new and more sophisticated HRM practices (Putnam et al.,  
228 2014).

229 Within the broad field of HRM, an area in which the application of paradox theory is still  
230 underdeveloped is green HRM, a matter to which recent HRM research and practice have devoted  
231 increasing attention, especially in the past decade. Indeed, several scholars have studied the relation  
232 between HRM and the firm’s environmental performance (e.g. Jabbour et al. 2008; Harris and  
233 Tregidga 2012; Jackson et al. 2012; Paillé and Boiral 2013), and HRM journals have devoted special  
234 issues to the topic (see Human Resource Management, 2012). Similarly, practitioners’ professional  
235 associations have dedicated publications to it (SHRM, 2011 and 2013; CIPD, 2012 and 2013).

236 Empirical research has shown that HRM practices can effectively contribute to improvement of the  
237 organization’s environmental performance. A recent review of research works by Renwick and

238 colleagues (2013) confirmed that HRM practices affect the environmental performances of firms.  
239 Specifically, the authors adopted a synthetic representation by Jiang and colleagues (2012) of the  
240 key components of the HRM system, which – drawing on AMO theory (Appelbaum et al. 2000) –  
241 is conceived as composed of three main HRM policy domains: (1) the knowledge, skills, and abilities  
242 (KSAs) domain (i.e. recruiting, selection and training), (2) the motivation and effort domain (i.e.  
243 performance management, compensation and incentive), and (3) the opportunities-to-contribute  
244 domain (i.e. employee involvement, industrial relations, and job design). Following this line of  
245 analysis, Renwick and colleagues (2013) showed that all the three components of the HRM system  
246 can improve organizational environmental performance by adopting environmental criteria in hiring  
247 and selection and conducting training and development programs on green-related issues (e.g.  
248 Jabbour 2013) – the KSAs domain; by developing employee motivation and commitment to  
249 environmental management (e.g. Fernández et al. 2003) through formal and informal, monetary and  
250 intangible incentives (e.g. Berrone and Gomez-Mejia 2009) – the motivation and effort domain; and  
251 by offering opportunities to contribute to the sustainability debate within the company through  
252 individual and collective engagement processes (e.g. Harvey et al. 2013) – the opportunity-to-  
253 contribute domain.

254 Although the growing stream of research on Green HRM has largely extended the available  
255 knowledge, it still seems to have neglected the paradox theoretical approach. As in the broader field  
256 of HRM, the application of paradox theory to green HRM is a possible source of innovative  
257 analytical and practical insights. This opportunity has been recently acknowledged by Jackson  
258 (2012), who found that extant research on green HRM is mostly focused on content and design  
259 issues. Jackson consequently called for a “problem-focused agenda for research on workforce  
260 management and environmental sustainability” in order to recognize that “HRM practitioners  
261 negotiate solutions that optimize results against multiple and sometime conflicting goals, introduce

262 changes while at the same time sustaining a sense of continuity, respond to signals that suggests that  
263 current conditions are changing, and remain flexible enough to adjust to an unknown future” (2012  
264 p. 420). The apparently ambiguous posture of HRM practice noted by Jackson is connected with the  
265 very nature of the idea of paradox, which assumes that organizations are webs of tensions where  
266 opposing poles simultaneously co-exist and mutually reinforce each other. We thus argue that  
267 paradox theory is a valuable theoretical lens through which to address the above-cited “problem-  
268 focused agenda” for green HRM and, at the same time, to provide HRM practice with data-driven  
269 recommendations.

270 Jackson also notes that “HRM scholars may recognize the need for internally consistent workforce  
271 management practices, but often they focus their research efforts on just one or two elements of the  
272 total system. Following the logic of ‘basic science’, they search for fundamental principles that apply  
273 across contexts. But this approach seldom produces clear answers to the questions that practicing  
274 managers must answer” (2012, p. 419). According to Jackson, if research on environmental  
275 sustainability and green HRM is to improve its relevance to practice, HRM researchers should focus  
276 on a wide set of green HRM practices, rather than on specific interventions, in order to endorse a  
277 systemic perspective that acknowledges the complexity and variability of experiences in  
278 organizations when managing sustainability issues. Similarly, Renwick and colleagues (2013: 10)  
279 emphasize the need to consider the workings of the entire HRM system instead of focusing on one  
280 or a few HRM practices. It is for this reason that in our study we focus on the overall green HRM  
281 system, rather than on a narrow set of specific practices – a perspective which we believe is much  
282 closer to that of practitioners in organizations.

283

## 284 **2.3 Objective and research questions of the study**

285 In the review of the literature, we identified a basic knowledge gap as follows: both sustainability  
286 and HRM have proven to be paradoxical fields in organizations. Although this topic is addressed  
287 by several theoretical and empirical studies, it seems to be neglected by green HRM scholarship.  
288 In order to fill this gap, the present paper explores the paradoxes perceived by organizational actors  
289 when designing the HRM system intended to support the company's development towards  
290 environmental sustainability. The above-mentioned overarching objective of the study has been  
291 translated into the following two research questions, which guided the empirical work as well as  
292 the illustration of the findings:

- 293 1) Where did environmental sustainability impact on the HRM systems of the companies that we  
294 studied?
- 295 2) Are there, and what are, the paradoxes that these companies encounter when implementing  
296 green HRM policies and practices, and what were they?

297

## 298 **3. METHODS**

299

### 300 **3.1 Research Design**

301 Since the aim of the research was to investigate the paradoxes related to the design of green HRM  
302 systems, we adopted a qualitative and interpretative approach (Schwandt 1994). Previous studies  
303 had identified and theorized paradoxes through rich case studies (e.g. Leonard-Barton 1992;  
304 Westenholz 1993). Similarly, our research was based on a multiple case study design in order to

305 gain broad understanding of the topic and a robust basis for analysis and discussion of the results  
306 (Eisenhardt 1988; Yin 2003).

307 Qualitative research can be undertaken from a deductive or an inductive perspective. Deduction is  
308 when researchers work within a defined framework; whereas induction is when they see the  
309 development of relevant theory, new propositions and concepts as the purpose of the research  
310 project (Whetten 1989). In our research we sought to combine both deduction and induction because  
311 we believe, with Suddaby (2006), that new ideas arise from the combination of these two  
312 fundamental approaches.

313 Accordingly, we started by investigating the green aspects of the HRM systems of the companies  
314 studied. Then, when analyzing tensions and conflicts, we maintained an ‘open’ attitude towards the  
315 concepts and themes emerging from analysis of the interviews in order to formulate our own  
316 contribution to theory.

317 We decided to focus on the Italian context for two main reasons. First, in Italy, HRM is based on  
318 what is known as the European model (Mayrhofer et al. 2012), which, compared to the US model,  
319 has a stronger stakeholder orientation and is more deeply embedded in society and social awareness.  
320 Moreover, according to Albareda and colleagues (2008), in Italy the government plays a  
321 fundamental role in promoting environmental sustainability and leading companies towards social  
322 and environmental objectives through dedicated policies (Perrini et al. 2007; Russo and Tencati  
323 2009; Habisch et al. 2011). Italian companies are therefore in a cultural and institutional context  
324 which motivates them to address social and environmental issues through a constructive and  
325 participatory dialogue with their stakeholders stimulated by the government’s action.

326 Within this national context, case selection was guided by the purposeful sampling method (Patton  
327 2002), which selects cases on the basis of their relevance to the research object and purpose. We  
328 centered our sampling procedure on the members of a private foundation that interconnects

329 companies involved in social and environmental sustainability actions. The requirements for  
330 organizations to be included were: (i) a high mandate within decision-making processes on HRM-  
331 related issues; (ii) a significant commitment to environmental sustainability; (iii) relatively broad  
332 experience in green HRM. In order to meet these requirements, we mainly selected companies with  
333 Italian ownerships, since we wanted to collect opinions directly from planners of sustainability and  
334 HRM policies; we conducted exploratory analysis of the corporate websites of the foundations  
335 members to evaluate those policies, and we were also supported by the board of the foundation,  
336 which drew on its deep knowledge of the members to indicate those most engaged in green HRM  
337 programs.

338 This procedure assured the relevance of the cases to the purpose of the research, as well as the  
339 interest and collaboration of participants. We selected ten possible participant companies, six of  
340 which agreed to take part in the research. The entire fieldwork lasted ten months, from March to  
341 December 2013. All the interviews were conducted directly in the offices or establishments of the  
342 companies. Table 1 summarizes the main characteristics of our sample.

343 [TABLE 1 AROUND HERE]  
344

### 345 **3.2 Data Collection**

346 The case studies involved the extensive interviewing of key organizational actors, coupled with the  
347 use of documentary evidence in the form of company reports, documents, corporate websites, and  
348 other materials provided by interviewees. Before approaching each company, we generated  
349 background information and circulated it within the research team. The latter consisted of two senior  
350 researchers in HRM and organizational behavior, experienced in conducting research projects on  
351 HRM topics that involve multiple private-sector companies, and two junior researchers at PhD level  
352 with previous experience of qualitative data collection and analysis.

353 When the companies were approached, we initially asked if we could conduct interviews with the  
354 HRM Director (HRMg), the Environmental Manager (EnvMg), and the Corporate Social  
355 Responsibility Manager (CSRMg). However, in some cases the specific role did not exist, or roles  
356 overlapped in the same person. The last column of Table 1 summarizes the number and order of  
357 interviewees for each company, and their roles in the organization.

358 We organized the interviews so as to have the HRM director as the last interviewee. The interviews  
359 with CSR and Environmental managers covered aspects such as the implementation of sustainability  
360 policies in the company, current strategies and practices, responsibility for environmental matters  
361 and 'green' performances, the contribution expected from the HRM department, and possible  
362 sources of tensions. In the HRM director interview we collected information on the key features of  
363 the green HRM system implemented by the company. We followed the above-illustrated  
364 representation of the HRM system based on AMO theory, distinguishing its specific components  
365 and their expected and actual impacts. In so doing, we referred to the general green HRM policies  
366 and practices applied in each company, without focusing on a particular category of employees in  
367 order to obtain a comprehensive representation of their green HRM systems. We concluded the  
368 interview by examining the paradoxes affecting those systems. We tackled this topic by deciding not  
369 to introduce the notion of paradox in our questions, but instead to rely on the common meaning of  
370 the term 'tension' as a sensitizing concept (Blumer 1954) with which to explore problems and  
371 potential conflicts inherent to green HRM.

372 The main data-gathering technique was the semi-structured interview (Drever 1997), which we  
373 applied by following the guidelines for the ethnographic interview (Spradley 1979). In this regard,  
374 the interview protocol was used as a flexible tool instead of a rigid scheme: we prioritized the natural  
375 development of the interviewees' discourses, adapting the interview track while performing it.



376 All the interviews were conducted in Italian in the presence of two researchers, and they lasted  
377 between one and two hours. The interviews were transcribed and translated into English in a way  
378 that preserved their original meaning. The final empirical documentation of our research resulted in  
379 16 interview reports, which were supported by written documentation both self-collected and  
380 provided by the interviewees.

381

### 382 **3.3 Data Analysis**

383 Our analysis procedure made general reference to the guidelines for applied thematic analysis as  
384 indicated by Guest et al. (2012). Accordingly, we organized the analysis into two steps.

385 First, we performed a structural coding process (Guest et al. 2012). This means that, based on our  
386 research questions and the literature review, the researchers shaped different categories and  
387 completed them for each company. Quotes and information about the green HRM system of each  
388 company were summarized in a contrasting matrix and examined using a case-oriented approach  
389 (Miles and Huberman 1994). Our initial purpose was to determine the impact of environmental  
390 sustainability on the HRM system of each company; the main results of this operation are  
391 summarized in section 2 of the findings and in Table 2.

392 We then conducted a cross-case analysis to identify elements recurrent across companies. This  
393 analysis was based on the identification of themes: following Ryan and Bernard (2003), we inspected  
394 the transcripts for recurrent arguments, comparisons and metaphors, making large use of indigenous  
395 categories to code the text. We were particularly interested in detecting episodes that revealed  
396 problems in the companies' green initiatives, and in the evaluation of their environment-related  
397 HRM practices by the interviewees.

398 In this phase, two coders worked separately in order to avoid thinking inertia. Each researcher drew  
399 up a list of paradoxes that were then discussed jointly by the research team. Once a shared definition  
400 of each paradox had been established, the researchers again went through the texts, re-coding them.  
401 Problems and inconsistencies were resolved by basing the interpretation on the identification of  
402 ‘exemplar quotations’. These quotations were included in the description of the paradoxes (section  
403 3 of the findings) and helped to anchor the research results (Guest et al. 2012). The triangulation of  
404 analysis (Denzin 1978) also helped to enhance the reliability of the results, since only one of the  
405 coders was also present during the interviews. The entire process was supported by the Atlas.ti 7  
406 qualitative data analysis software.

407 We finally organized a focus group with seven of the managers interviewed, to whom we presented  
408 our data interpretations. On this occasion, the HR managers acknowledged the explanatory capacity  
409 of paradox theory in helping them diagnose the tensions characterizing the green HRM systems of  
410 their companies. Although the aim was not to seek confirmation or disconfirmation of results, this  
411 further interview session enabled us to refine our analysis and integrate the findings on the basis of  
412 the practitioners’ feedback (Bloor et al. 2001).

413 The research findings are presented in the next section. We first introduce the key features of the  
414 green HRM systems that we studied and then present the paradoxes characterizing those systems.

415

416

417

418

## 4. FINDINGS

419

## 420        **4.1 Key Features of the Green Human Resource Management System(s)**

421        A considerable part of our research was devoted to understanding what kind of HRM-related actions  
422        companies put in place in order to support the organization’s environmental performance. For this  
423        purpose, part of the interviews explored the extent to which the various components of the HRM  
424        system were devoted to green purposes by the companies. The practices that emerged from the  
425        interviews are now described (and summarized in Table 2) following the above-presented  
426        representation of the HRM system proposed by Jiang and colleagues (2012).

427

### 428        **4.1.1 Knowledge, Skills and Abilities**

429        *Recruiting.* All the HR managers interviewed recognized the positive impact of communicating  
430        sustainability plans to potential applicants, especially to young and educated ones, since younger  
431        people are considered more sensitive to environmental matters. Among the HR managers  
432        interviewed, only the HR manager of company F did not communicate green actions to the labor  
433        market because, he argued, “the strategy of the company is focused more on implementing green  
434        plans than communicating them”.

435        *Selection.* The HR managers took two approaches to designing selection processes to support  
436        environmental performance: (i) including environmental sustainability-related issues in interviews  
437        and reflecting on them during the selection process to check candidates’ sensitivity and alignment  
438        with the company’s view (companies A, D, and E); (ii) including environmental sustainability-  
439        related issues in interviews but focusing only on technical skills and not on environmental sensitivity  
440        when selecting candidates (company B). In fact, the HR managers did not consider a ‘green  
441        credential’ to be a discriminatory criterion for hiring: this happened only in the case of technical  
442        roles requiring environment-related skills and knowledge as essential components of the job

443 requirements. Interestingly, company B remarked that its focus in the selection process on ‘green’  
444 technical skills for specific positions was due to the fact that, in many cases, Italian and European  
445 public administrations, which represent a significant market for the company, require their service  
446 providers to declare, in commercial proposals, the extent to which the employees with key roles in  
447 the project possess environment-related competencies or certifications.

448 *Training.* While some HR managers organized environmental training only for specific positions  
449 related to environmental issues (company C), others arranged training for all employees (companies  
450 A, D and F). Notably, all the companies that provided extensive environment-related training to  
451 large proportions of their employees (A, D and F in our sample) took advantage of public funds  
452 devoted, by local, national or European public policies, to the support of employee competence  
453 development on green-related issues. Moreover, because selection and training practices were  
454 considered jointly when developing the necessary skills, a company may invest more in the selection  
455 process and less in training, or vice versa. For instance, company E’s HR manager declared that they  
456 had decided to focus on environment-related skills in the selection process in order to avoid investing  
457 in environmental training.

458

#### 459 **4.1.2 Motivation and Effort**

460 *Performance Management.* The HR managers of companies B and C stated they were interested in  
461 measuring only those environmental performances that enable cost reduction. Nevertheless, it was  
462 also possible to find individual or unit performance targets aimed at improving organizational  
463 environmental performances (companies A, D, E and F).

464 *Incentive and compensation.* The companies had introduced both monetary and non-monetary  
465 incentives to motivate employees in regard to environmental plans (companies A, C, D, E and F).  
466 They sometimes employed creative forms of symbolic reward, such as the planting of a tree for each

467 employee, ‘employee of the month’ prizes, or even chances for employees to attend a week-long  
468 WWF (World Wildlife Fund) camp (company F).

469

#### 470 **4.1.3 Opportunity to Contribute**

471 *Employee involvement.* The companies sought to increase the participation of their employees in  
472 environmental sustainability plans by using suggestion boxes, conferences, meetings, sustainability  
473 reports and social networks (e.g. the company intranet). For example, whereas companies A and D  
474 used suggestion boxes to involve employees in sustainability processes, rewarding suggestions  
475 according to the level of their applicability, company E used its intranet as a tool through which  
476 employees could exchange views on environmental sustainability.

477 *Job Design.* Environmental tasks were never included in job descriptions, with the exception of  
478 special technical positions or responsibility roles (e.g. site managers for companies in the chemicals  
479 and steel industries, like A, C and E).

480 In sum, among the different components of the HRM system, we found that all the HR managers in  
481 the companies that we studied had adopted performance measurement practices to enhance  
482 environmental performance. Moreover, interviewees from five out of six companies stated that they  
483 applied recruitment, selection, and incentives policies to foster the environmental sustainability goals  
484 of their companies. Finally, we found that the job description was the tool least used to improve  
485 environmental performance, because only three companies had job specifics, and these specifics  
486 were only for positions directly related to environmental responsibilities. The details of each  
487 company’s green HRM practices are presented in Table 2.

488 [TABLE 2 AROUND HERE]

489

490

## 4.2 Eight Paradoxes That Occur When Human Resource Management Meets

### Environmental Sustainability

In this section, we report on the paradoxes emerging in relation to the design of green HRM systems. Analysis of our cases identified eight paradoxes, each of which is reported below. We present the sound but contradictory arguments that characterize each pole, and support these arguments with examples and quotations from the interview data.

#### 4.2.1 Green performance vs. other social and economic performances

Setting environmental goals along with other goals (economic, social, and human) puts companies in a complex situation and may bring a paradox to light. The first pole concerns employing HRM to improve environmental plans. However, fostering environmental plans increases the possibility of financial shortages and may be detrimental to other plans. Thus, the second pole of this paradox entails using the potential of HRM to enhance financial and social performances.

Since it was undergoing a major restructuring, Company B is an example of company where there has recently been an open conflict between environmental performance and social and financial performances. The general HR manager seemed to have a strong position on this issue:

*My policy is “people come before everything”, even sustainability; If we have to make cuts, we first cut all the rest, and only at the end, if necessary, we cut people. But you also have to include the other themes in this process because, for example, regarding sustainability, the working environment is crucial for employee satisfaction - [HRMg, B]*

The interviewee was aware that sustainability has implications for company life: for example, relative to employee satisfaction and work performance. Hence HR managers cannot entirely avoid

513 this dimension, and they have two main strategies with which to contribute to the greening of their  
514 organizations:

515 (1) focusing on green performances when they do not imply costs for the company;

516 *Our company is more concerned with cost reduction; it enables us to pursue our initiatives but*  
517 *without using any resources... and the imperative is always not to increase costs... - [HRMg, B]*

518 (2) implementing green performance when the company has no other priority;

519 *It is not easy to talk about sustainability when we are reorganizing production. There is a heavy*  
520 *climate in the company whereby some projects are seen as accessory - [CSRmg, C]*

521 This paradox occurs at a very basic level of the HRM system: managers encounter it when they want  
522 to set the direction and objectives of the green HRM system. The companies that we studied were  
523 strongly committed to environmental sustainability; they therefore all expressed the desire to  
524 improve environmental performance. Nevertheless, when there were other issues at stake, these  
525 companies preferred to pursue environmental sustainability goals as ‘accessory’ ones and to  
526 prioritize other objectives.

527

#### 528 **4.2.2 An open vs. a closed green HRM system**

529 Environmental sustainability poses the following question for managers: what is the context of our  
530 actions? Is it HRM policies and practices, the entire organization, or should external actors also be  
531 involved? When structuring the boundaries of green HRM systems, companies should pay attention  
532 to the emergence of the following paradox.

533 On the first pole, companies could undertake actions directed at external parties like the employers’  
534 association, non-profit associations, public administrations, suppliers or even customers. The second  
535 pole of the paradox consists of strategies centered on the internal dimension of organizations.

536 The ambitious recruitment plan of company D represents a case of an ‘open’ HRM system:

537 *Five years ago, when many elderly workers took early retirement, the company was devoid of skills:*  
538 *fresh intake had to remedy the losses. [D]’s managers decided to develop a recruitment program in*  
539 *collaboration with local technical high schools. They started to select outstanding students willing*  
540 *to undertake a dual training program [...] the selection was supported by a work psychologist, who*  
541 *helped the company to assess candidates’ attitudes towards environmental and safety issues. At the*  
542 *end of the project, all the trainees were hired... - [HRMg, D]*

543 The project “was a success”, concluded the interviewee, because it enabled the company to create a  
544 trust relation with the new employees, as well as with the local community and its educational  
545 institutions.

546 Although actions of this kind positively affect relations with the organization’s external context, they  
547 may also present some difficulties. For example, the environmental manager of a pharmaceutical  
548 company (C) explained that customers are used to glass bottles as drug-containers, but glass is not  
549 environmentally friendly, since it entails high costs and is not recyclable. A possible solution  
550 proposed by the interviewee was to provide training and information to customers while extending  
551 the boundaries of the green HRM system. “But it is hard to change the mentality” she concluded,  
552 explaining why the company decided to not undertake any further initiative in this direction.

553 Another difficulty occurs when partners pay little attention to environmental aspects. Whilst a  
554 partnership, with a supplier for example, can be useful, companies often encounter the problem that  
555 other organizations lack technical knowledge or commitment; in other words, companies may have  
556 few internal tensions whereas external resistance may be huge.

557 By choosing the first pole, HR managers can also have an impact outside the company boundaries,  
558 although in many cases there is high external resistance. The alternative is to focus on the internal  
559 workforce, relying for example on training instruments and intervention on work practices. A  
560 ‘closed’ HRM system forgoes the creation of synergies and collaborations with a wider range of



561 actors outside the organization, thus limiting possible difficulties but also its scope and margin of  
562 action.

563

#### 564 **4.2.3 Focusing the green HRM system on everyday work vs. symbolic events**

565 HRM was often depicted in the interviews as a ‘soft function’, by which is meant that it especially  
566 concerns cultural aspects such as the fit between company values and employees’ values, their  
567 sensitivity and attitudes towards certain topics. Nevertheless, organizations also have a ‘hardware’  
568 consisting of rules, procedures and work habits.

569 Consequently, sustainability can assume one or other of these two faces. This paradox has to do with  
570 the degree of formalization and integration of the green HRM system in the organization. At one  
571 pole there is a conception of sustainability as a mainly cultural dimension manifest in speeches,  
572 slogans, symbols, yearly meetings, or resounding initiatives. At the other pole, environmental  
573 sustainability is widespread in the organization because managers integrate it into everyday work  
574 through regulations and procedures.

575 HR managers must address this paradox when formalizing green HRM policies and practices: should  
576 they act at the level of the symbolic representation of the company, or should they be more focused  
577 on the concrete work activity? The HR manager of C described the issue in these terms:

578 *I think there is a small gap between corporate culture and the concrete organization with its*  
579 *procedures... although the cultural level somehow compensates for this procedural inadequacy. It*  
580 *is sometimes difficult to move from initiatives to policy because our company style is liquid, fluid,*  
581 *and it is difficult for us to structure our initiatives - [HRMg, C]*

582 When the cultural aspect of sustainability prevails, it creates enthusiasm and involvement,  
583 reinforcing the company’s values and its public image. At the same time, it is a signal that  
584 sustainability needs periodic recall in the minds of everybody; otherwise it will be overlooked. It is

585 for this reason that the HR manager of company F hoped for a gradual evolution towards greater  
586 integration of sustainability into “everyday business”:

587 *Communication and involvement are really important, not only in relation to sustainability, and we*  
588 *have to balance symbolic situations and everyday business. The company can consider itself mature*  
589 *when there is no longer a need for celebratory occasions with high emotional value, such as the*  
590 *annual sustainability day - [HRMg, F]*

591 On the other hand, this is how the CSR manager of E illustrated the shortcomings of a highly  
592 formalized green HRM system:

593 *We do many things, but sometimes you lose the general sense of what you are doing: in the end, you*  
594 *do not know if your actions have had a positive impact at the global level or any impact at all...*  
595 [CSRMg, E]

596 Although simplifying and overemphasizing certain aspects, communication and symbolic events  
597 provide all employees with a ‘general sense’ of their environmental efforts. But managers should  
598 also help to integrate environmental sustainability into the organizational routine, in order to  
599 influence concrete work practices. In conclusion, when defining the formalization of green HRM  
600 systems, companies need constantly to balance “symbolic situations and everyday business”.

601

602

603

#### 604 **4.2.4 Collective vs. Individualized Green HRM Practices**

605 Every company is a mixture of employees with different characteristics, interests, and perspectives:  
606 these often represent a problematic aspect of organizations. In other words, internal diversity gives  
607 rise to a paradoxical situation. Companies in which explicit messages and strategic statements

608 connect visions and missions to environmental goals are aware that those messages have different  
609 audiences. This paradox emerges when setting the level of standardization of the green HRM system.  
610 At one pole there are undifferentiated messages and practices that clarify ambiguities regarding  
611 strategic environmental plans. The alternative strategy is to focus on the attitudes of employees and  
612 assign suitable practices to different categories.

613 For example, in company C environmental efforts were directed at all employees without  
614 considering their position and organizational level.

615 *Not all of the middle managers are fully committed to ES and we take the risk of sending ambiguous*  
616 *messages to all workers: it might be that an employee is strongly committed to environmental*  
617 *sustainability, whereas his/her direct supervisor is not committed at all... - [HRMg, C]*

618 Neglecting different orientations and positions may affect the way in which supervisors manage their  
619 subordinates, causing misunderstandings and failures.

620 For example, the HR manager of company D explained that, while younger people are more sensitive  
621 to environmental plans, older workers “for reasons such as age and monoculture” regard  
622 environmental plans as unnecessary. The company decided to deal with this inconsistency by  
623 differentiating HRM practices in relation to the different age groups. We have already illustrated  
624 (paradox 2) the company’s ambitious recruitment plan, which injected young, environmentally  
625 sensitive employees into the organization. Regarding senior employees and workers, they decided  
626 instead to intervene on work practices, modifying the layout of workplaces and introducing rules  
627 and procedures on safety and waste disposal: since they could not impact on the inner beliefs and  
628 values of this part of the workforce, they decided to act on concrete work behaviors in order to reduce  
629 the inconsistency within the company.

630 The universal approach is simple to manage and effective in the case of strong homogeneous  
631 company cultures, and when there is a shared commitment to sustainability goals at all company

632 levels. Conversely, it fails to address different values and interests of employees when internal  
633 heterogeneity is high. The individualized approach instead needs more time and preparation, but it  
634 is successful in taking advantage of potential capabilities of even those employees who are not green-  
635 oriented.

636

#### 637 **4.2.5 Value-free vs. Value-based Employee Involvement**

638 In the management of HR, some choices must be made with regard to how much a company wants  
639 its employees to be engaged in sustainability efforts, and what kind of involvement they should have  
640 in the realization of environmental plans.

641 Employee involvement may be on a purely instrumental basis defined in the employment contract  
642 and supported by the benefit system. Or it may be rooted in personal attitudes that mobilize  
643 employees' values and sensitivity. This paradox operates at the level of motivations and  
644 opportunities for employees to participate.

645 An example of value-free, transactional involvement is provided by company F, which operated in  
646 mass retailing. This company had implemented a system of sanctions to induce store-level  
647 collaborators to collect waste packaging in the proper manner. Value-free involvement mechanisms  
648 can reach all the employees in the organization, not only those already committed to environmental  
649 sustainability. A system of control and sanctions of this kind is effective in reducing deviant behavior  
650 and free riding, although it does not assure a workforce truly committed to environmental actions.

651 It is important to have employees aligned with the organization's overall vision and mission. It is for  
652 this reason that some companies (A, C, E) declared that they sought to verify candidates' 'green  
653 orientation' during job interviews. However, when managing their personnel, a further process of  
654 involvement raised the risk of creating new expectations and demands for companies:

655 *There's fear and uncertainty in every change process. Many people do not do their best because they*  
656 *do not know where the change is leading. There's also a fear in activating people: they may become*  
657 *more critical and ask always for more if the company shares some problems or doubts... - [HRMg,*  
658 *F]*

659 The same risk was identified by the CSR manager of E, who stated that when she asked someone  
660 for their opinion, “they [would] come back and ask me for feedback”. This is because people are not  
661 easily satisfied and “always want to know the result of their contribution”.

662 The paradox is essentially related to whether a company prefers ‘activated’ employees, accepting  
663 the implications of raising their motivations and expectations; or whether a company prefers value-  
664 free employee involvement. Benefit/sanction systems reinforce an exclusively instrumental attitude  
665 towards sustainability goals; but at the same time, they are less problematic from the managerial  
666 point of view and more effective in reaching the workforce as a whole.

667

#### 668 **4.2.6 Top-down vs. bottom-up change processes**

669 In our research we found that the nature of environmental sustainability implementation can be  
670 traced back to either top-down or bottom-up change processes. Strategic and structured actions  
671 pertain to top-down practice, meaning that they start from top management and then follow the  
672 process structured by top managers. By contrast, companies can obtain involvement, commitment  
673 and participation through bottom-up processes, which arise mainly from employees and then spread  
674 to the upper levels of the organization.

675 There are many reasons that induce companies to choose top-down practices: for example, the  
676 influence of top management decisions, the possibility of cost reduction and clear evaluation of  
677 interventions, or the possibility to implement prompt corrective actions. For example, company E,  
678 had decided to opt for a general top-down approach to sustainability; the CEO said that this was

679 necessary because otherwise there would have been no significant improvement in the company's  
680 environmental performance.

681 One problem with this approach is that it places a great deal of stress on results, even though when  
682 companies undertake an action, the results are not certain and information is never complete.

683 *When colleagues devise a project, a doubt remains: can we manage to balance people, planet earth,  
684 and profits? The goal is ambitious, the project goes in the right direction, with data on the reduction  
685 of carbon dioxide and waste... but one may wonder how much the model actually affects global  
686 balances. It is a virtuous path, but to what extent can you affect this balance?- [CSRMg, E]*

687 Moreover, when companies follow this pathway, it seems that they have difficulties in creating  
688 commitment:

689 *The main challenge is creating commitment. This is the most difficult thing needed to start the  
690 project, because it requires a substantial initial investment and it is hard to manage involvement -  
691 [CSRMg, E]*

692 Alternatively, management can support the emergence of ideas by creating spaces and opportunities  
693 for employees to participate. In this regard, company E also tried to stimulate suggestions and change  
694 initiatives from the employee level. This bottom-up approach was characterized by “less pressure”  
695 and “more spontaneity” in the words of the interviewee. Nevertheless, there were some other  
696 weaknesses:

697 *We organized forums where people could discuss environmental sustainability. We were trying to  
698 reduce impacts at the individual level, including private life, but some saw it as an intrusion, because  
699 they saw a disproportion between individual and business impacts. These topics are delicate and  
700 may cause employee complaints - [CSRMg, E]*

701 The advantage of top-down initiatives is that they are more effective and controllable, although they  
702 may suffer from a lack of commitment. Bottom-up processes are more spontaneous; but when they

703 are in place, it is difficult to undertake a consistent set of environmental actions, or to frame them in  
704 integrated environmental reports and branding activities, because the lack of a clear direction may  
705 lead to ambiguous outcomes, disagreement, or even rejection.

706

#### 707 **4.2.7 Centralization vs. decentralization of the green HRM system**

708 Managers know that environment-related plans require not only resources and funds but also  
709 consistency in their implementation and the involvement of all departments. In light of these  
710 requirements, a key question is whether the company should have a separate centralized  
711 environmental department or environmental professionals working in all departments (decentralized  
712 structure). This question concerns the structuring of green HRM systems, and it directly affects the  
713 criteria defining all the three HRM policy domains (i.e. knowledge, skills, and abilities; motivation  
714 and effort; opportunities-to-contribute).

715 A centralized environmental department enables companies to undertake explicit and distinct  
716 environmental actions and to have specialized employees whose abilities, roles and responsibilities  
717 are clearly defined for the other departments.

718 On describing the relation with the HRM department of her company, the head of the environment  
719 department of company C said:

720 *The contribution of the HR results in strongly supportive action. For example, when communicating*  
721 *to employees the results of environmental performances such as waste collection, recycling, energy*  
722 *savings ... - [EnvMg, C]*

723 Nevertheless, centralized structures may pass on problems from one department to another,  
724 complicating company structure and decision-making. Another problem of centralization is that the  
725 environmental competences of the HRM department may not be enough to guide employees:

726 *In terms of supportive training, the HR plays a passive role, since the environment department*  
727 *proposed the environmental training and the HR only agreed with them* -[ENVMg, C]

728 Companies need culture, time and training to become decentralized. However, this strategy is  
729 attractive for organizations because it decreases the misconnection between departments. A concrete  
730 example of decentralization is provided by the role of the sustainability development coordinator  
731 (SDC) in company F. The definition of this role emphasizes the fact that sustainability development  
732 is considered to be common responsibility in the company.

733 *Our slogan is: everyone is responsible for every responsibility!* [emphasis]. *Responsibility thus*  
734 *refers to good suppliers, transport, people management, customer contact, products marketing,*  
735 *support in the use of increasingly green products, impact in the area where the store is located,*  
736 *waste disposal [...] every business unit works to reinforce the sustainability process* - [SDC, F]

737 Company F, which operated in mass retailing, had a highly decentralized structure. Since the  
738 beginning of its sustainability strategy, established in every store had been ‘green teams’ which  
739 devised and pursued their own environmental initiatives. An emerging problem was that realization  
740 of these initiatives was strongly dependent on the willingness of local actors like store managers.

741 In conclusion, decentralized structures are more difficult to achieve, and stakeholders within and  
742 outside the organization may consider the environment to be a secondary concern because there is  
743 no central authoritative interlocutor. Centralization instead assign clear tasks and responsibilities to  
744 specialized managerial figures, but it increases internal disconnection because other departments can  
745 only play a supportive role in the development and realization of environmental plans.

746

#### 747 **4.2.8 Role of the HR manager: personal credibility vs. professional credibility**

748 The last paradox has to do with the degree and form of involvement of employees in the greening of  
749 their companies, and it focuses on those actors in the organization who work directly on the HRM



750 system: HR managers and their staff. This paradox is related to the personal positioning of people  
751 working in HRM departments with regard to environmental sustainability. The issue at stake is this:  
752 is it preferable to have ‘technical’ support, based mainly on the company’s requirements and  
753 operating through the classic HRM tools; or to have the ‘personal’ involvement of HR managers  
754 which overcomes the boundaries of their professional and working lives?

755 The two poles are well exemplified by the opposed positions of two interviewees. According to the  
756 HR manager of B, “beyond ethics and an ideal commitment to improving the world, which are part  
757 of every individual, the role of the HR manager should be distinct...”, since – the interviewee further  
758 explained – it is not part of this role to promote environmental sustainability at the company level.  
759 Another interviewee instead preferred a more ‘exposed position’ from the point of view of his private  
760 life and everyday choices:

761 *The most difficult thing was changing personal behaviors in order to reach congruence between*  
762 *what is said and done in lifestyles, especially in the domestic and private sphere. Because in order*  
763 *to spread a green message I must be believable [emphasis]. So, me and my family, we decided to*  
764 *make purchase choices such as getting rid of the car, paying attention to water and energy*  
765 *consumption, etcetera. This enabled me to see myself as a reliable interlocutor and as carrying*  
766 *forward environmental efforts for my company in a vigorous way - [HRMg, F]*

767 According to the first interviewee, a ‘professional approach’ focused on specific HRM tools  
768 strengthens the position of HR managers and gives them more power in supporting sustainability  
769 policies along with other organizational objectives. By contrast, the second interviewee thought that  
770 the personal example of HR managers in the promotion of sustainability at company level, although  
771 less systematic, was more effective in “carrying forward environmental efforts” in regard to himself  
772 and the employees.

773 In the first case, the HR manager is a ‘professional supporter’ of sustainability, helping to design a  
774 technically optimal green HRM system involving recruitment, training, job design, benefits, etc. In  
775 this way HR managers support the greening of their organization by doing what they know best:  
776 HRM. The other option is to overcome role boundaries by bringing personal values into work, so as  
777 to heighten the effect of green HRM interventions with the personal examples and beliefs of HR  
778 managers.

779

780

## 5. DISCUSSION

781

782 In the previous section we presented: (i) the features of the green HRM systems implemented in each  
783 organization, considering respectively ability-enhancing practices (recruiting, selection, training and  
784 development), motivation-enhancing practices (performance management, incentive and  
785 compensation), and opportunity-enhancing practices (employee involvement and job design  
786 practices); (ii) the eight paradoxes that we identified in the companies analyzed when HRM meets  
787 environmental sustainability. In this section, we discuss the knowledge advances of the research  
788 findings.

789 In regard to our first result (i.e. the green HRM practices implemented by the organizations studied),  
790 those organizations had a broad set of implemented practices. We found that the organizations  
791 selected engaged in practices similar to those considered by previous studies (referring in particular  
792 to Renwick et al., 2013). For example, five out of the six companies analyzed had green practices  
793 covering all three components of the HRM system, i.e. green HRM practices enhancing abilities,  
794 motivations, and opportunities. The exception was by company B (a global company operating in  
795 the consultancy industry) which did not implement any practice included in the opportunity domain.

796 This confirms that the practicing managers whom we interviewed operated on a highly diversified  
797 set of green HRM policies and practices, experiencing the complexity and interrelation of  
798 sustainability-oriented interventions in organizations. Therefore, following Jackson (2012), we  
799 argue that, by analyzing the overall green HRM system rather than a limited set of HRM practices,  
800 our study derived a picture of green HRM close to the concrete everyday experience of practitioners  
801 in organizations.

802 Moreover, in relation to the relevance of the national and institutional context, we showed how these  
803 companies implemented green HRM practices in order (i) to fulfill explicit commercial requirements  
804 imposed by public administrations in relation to the green-related competencies that key employees  
805 of their service providers are required to possess, or (ii) to take advantage of public resources  
806 supporting extensive training activities on green-related issues.

807 Besides these observations relative to our first findings, we consider this study's essential finding to  
808 be that paradoxes characterized all the companies analyzed. Moreover, paradoxes were found to be  
809 pervasive in all the components of the green HRM system. Indeed, paradoxes were apparent in  
810 relation to the objectives of the green HRM system (paradox 1), its boundaries (paradox 2), its  
811 formalization (paradox 3) and standardization (paradox 4). Paradoxes were also found in relation to  
812 specific practices within the green HRM system, such as promoting employee green abilities  
813 (paradox 7), motivation (paradox 7), and opportunities (paradoxes 5, 6, and 7). Finally, it emerged  
814 that even the role of the HR manager becomes paradoxical in environmental sustainability-oriented  
815 companies (paradox 8).

816 These findings extend the previous literature in two directions.

817 First, although our results concern the experience of a limited number of companies, they show that  
818 sustainability in general, and environmental sustainability in particular, are intrinsically paradoxical  
819 and convey paradoxes to organizations – as has been illustrated by several contributions in

820 organization disciplines (e.g. Bansal 2003; Kleindorfer et al. 2005; Matos and Hall 2007; Wu and  
821 Pagell 2011; Slawinski and Bansal, 2012). As a consequence, we argue that the adoption of paradox  
822 theory as a lens through which to study sustainable HRM represents a fertile and insightful  
823 perspective, as theorized in the recent contributions by Ehnert (2009, 2014).

824 Second, this study contributes to the development of a more realistic and problematizing view of  
825 the concept of fit (Paauwe et al. 2013) by integrating – and contextualizing in the HRM field –  
826 management studies on paradox theory. Indeed, Cameron and Quinn (1988) state that considering  
827 paradoxes enables researchers to understand the complexity, ambiguity and diversity of  
828 organizations. Moreover, Eisenhardt and Westcott (1988: 170) claim that “the contribution of  
829 paradox to management thinking is the recognition of its power to generate creative insight and  
830 change”. Agreeing with authors that consider a ‘fit’ solution and polarized notions to be an  
831 oversimplified interpretation (Boselie et al. 2009; Paauwe et al. 2013), our study shows that ‘fit’ (i)  
832 is a complex task, since both poles of the paradoxes identified are attractive; (ii) is multi-level, since  
833 there are many paradoxes at different levels of green HRM systems; (iii) is dynamic, since it  
834 changes over time according to the priorities of organizations and their stakeholders. As a result,  
835 we draw attention to the two following questions: (1) can we really expect companies to have a  
836 perfect fit; in other words, is it doable? and (2) since many scholars such as Quinn et al. (1994) and  
837 Denison et al. (1995), refer to paradoxes as learning opportunities, can we really suggest that  
838 companies should constantly seek “the perfect fit”? Our findings support the idea that adopting a  
839 fit perspective in green HRM is problematic, because it may not account for the paradoxical  
840 tensions that seem to be persistent in green HRM systems, and because it may cause companies to  
841 miss the learning opportunities that those paradoxes offer.

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## 6. IMPLICATIONS FOR GREEN HRM PRACTICE

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845 The previous discussion brings us to the managerial implications of this study. From the standpoint  
846 of green HRM practice, we highlight the implications for two specific types of practicing managers.  
847 First, we believe that our findings are important for managers designing green HRM systems ‘from  
848 scratch’ because they can help those managers to make more informed design choices by considering  
849 the potential downsides. For example, a company might decide to mobilize its workforce towards  
850 environmental sustainability by developing more green-oriented values and organizational culture,  
851 rather than by incorporating it into standard procedures. Our findings – in particular paradox 5,  
852 ‘value-free versus value-based involvement’ – suggest to such a company that this choice has the  
853 potential to activate employees’ motivation on green issues. At the same time, however, without a  
854 system that sanctions free-riding behavior, the company is taking the risk not to ‘onboard’ the  
855 employees not sensitive to these topics. The list of paradoxes can thus be useful to warn practitioners  
856 of the possible ‘B-side’ of each design choice when arranging the green HRM system of their  
857 company. We argue that this warning function is particularly important in a growing field like green  
858 HRM, where there is the risk of applying oversimplified solutions, for example supported by global  
859 HRM consultancy firms, or of diffusing a ‘best-practicism’ mindset supported by success stories  
860 disseminated by non-scientific publications.

861 Second, the paradoxes illustrated can help managers working on existing green HRM practices to  
862 develop a constructive reaction to possibly emerging paradoxes. Indeed, we know from the previous  
863 literature that there are two possible reactions to paradoxes. The first reaction is to control/suppress  
864 the paradox, which means assuming a defensive position in an attempt to avoid it. The alternative  
865 reaction is to cope with/explore the paradox; this allows managers to consider paradoxes as

866 opportunities that enable them to profit from tensions (Eisenhardt and Westcott 1988; Lewis 2000;  
867 Ehnert 2009). The development of the latter reaction is fostered by recognition of the paradox and  
868 the related tension, as well as the view of them as “normal” rather than as “exceptional” elements of  
869 organizational life (Lewis 2000). From this perspective, the paradoxes presented here can be used  
870 by practitioners operating in environmental sustainability-oriented companies to recognize the  
871 paradoxes in their green HRM practices and to consider them as ‘normal’, in order to develop  
872 context-specific constructive coping strategies.

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## 7. CONCLUSIONS

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876 In conclusion, we recognize that green HRM is a relatively new and effervescent area of research  
877 and practice, and that application of a paradox view is an innovative contribution in this area.  
878 Therefore, like any other, this study suffers from some limitations that, given its exploratory nature,  
879 can be considered an agenda for future research. One limitation concerns the size and features of our  
880 sample, since we targeted six big environmentally-committed companies, with relevant experience  
881 in green HRM and operating in the Italian context, which has cultural and institutional peculiarities  
882 in regard to environmental sustainability. Future research (especially quantitative studies) could  
883 investigate, on a larger and differentiated sample, what organizational, cultural and institutional  
884 variables are associated with specific green HRM paradoxes. Secondly, our research involved only  
885 designers of environmental sustainability plans (i.e. HR, CSR and environmental managers) and not  
886 other organizational actors that are the ‘users’ of those plans, such as employees or line managers.  
887 Moreover, our interviews generally referred to green policies and practices applied to the whole  
888 workforce. Since HRM systems are usually differentiated for different groups of employees (e.g.

889 Dierdoff and Morgeson 2013), further research is needed to explore what are the paradoxes  
890 perceived by different occupational groups within organizations. Thirdly, we restricted our study to  
891 identification of the paradoxes without describing the coping strategies adopted by the organizations  
892 studied to deal with them and their outcomes: this also represents an avenue for future research.  
893 Notwithstanding its limitations and the exploratory nature of our work, we believe that this study  
894 represents a step forward in the study of green HRM in organizations. Through a multiple case study  
895 research design, we identified a list of eight HR-related paradoxes occurring in companies that  
896 pursue environmental objectives via HRM tools. The main contribution of our paper is that  
897 environmental sustainability brings a set of unavoidable paradoxes to HRM and, as a consequence,  
898 both researchers and HR managers need to recognize and learn possible ways to deal with them.

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